

BOBBY JINDAL
GOVERNOR



HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.

Agency Interest No. 1136
Activity No.: PER20090010

Mr. Glenn N. Bucholtz
General Manager
Shell Chemical LP
P. O. Box 500
Geismar, Louisiana 70734

RE: Part 70 Operating Permit Modification, EOEG-2 Unit, Geismar Plant, Shell Chemical LP, Geismar, Ascension Parish, Louisiana

Dear Mr. Bucholtz:

This is to inform you that the permit modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the 18th of July, 2011, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Done this _____ day of _____, 2009.

Permit No.: 2057-V5

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary
SGQ
cc: EPA Region VI

**AIR PERMIT BRIEFING SHEET
PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA**

I. Background

Shell Chemical LP owns and operates a chemical manufacturing complex located in Geismar, Louisiana. EOEG-2 facility was issued a Part 70 Operating Permit No. 2057-V3 dated March 21, 2007 which allowed the facility to include the High Purity Ethylene Oxide One (HPEO-1) project, partly dismantle the EOEG-1 unit, incorporate earlier approved minor permit actions, update the facility General Condition XVII and equipment fugitive components. Permit No. 2057-V4 dated March 21, 2007 allowed the facility to update the fugitive speciation.

II. Origin

A permit application dated September 17, 2009 was submitted by Shell Chemical LP requesting a Part 70 operating permit modification. Additional information as of October 23, 2009 was also received.

III. Description

Process unit EOEG-2 is an existing unit that produces ethylene oxide (EO) from the catalytic reaction of ethylene and oxygen. The EO is recovered by water absorption and steam stripping. The resulting aqueous EO is dehydrated and upgraded by fractionation to high purity EO (HPEO). HPEO is reacted with water to form ethylene glycol (EG). Lesser amount of diethylene and triethylene glycol (DEG and TEG) is also formed. The EG reactor effluent, a mixture of glycols and water, is dehydrated and the water recycled back to the reactor. The dehydrated mixed glycol stream is sent to the purification section for separation of the individual glycols EG, DEG, and TEG. EO is either used by other processes on site or shipped off site in tank cars. Glycols are shipped off site by tank trucks, tank cars, or by marine vessels. The emission sources for this process are process vents, storage tanks, fugitive components, cooling tower, loading/unloading operations, miscellaneous sources, Insignificant Activities and General Condition XVII Activities.

The facility is proposing to incorporate EOEG-2 Upgrade Project. This project will increase High Purity Ethylene Oxide (HPEO) production and simultaneously reducing the Ethylene Glycol production. To achieve this goal the following modification will be undertaken:

1. The EG-2 Unit will be modified to enable the turndown operation of EG-3 and additional equipment will be added to maximize the recovery of HPEO with the shift of ethylene oxide product from EG-2 to HPEO product;
2. Change the catalyst in the EOEG-2 Unit if required; and

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The increase in emissions due to the reconciliation do not exceed the Prevention of Significant Deterioration (PSD) significance threshold, therefore, this update does not require netting or PSD review. Similarly, the increase in emissions due to the reconciliation do not exceed the Nonattainment New Source Review (NNSR) significance threshold, therefore, NNSR is not required.

Permitted emissions from EOEG-2 Unit after the reconciliation in tons per year are as follows:

| Pollutant | Before | After | Change |
|------------------|--------|-------|--------|
| PM ₁₀ | 17.18 | 17.18 | - |
| SO ₂ | 0.19 | 0.19 | - |
| NO _x | 4.10 | 4.10 | - |
| CO | 12.29 | 12.29 | - |
| VOC | 47.03 | 50.37 | + 3.34 |

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

| Pollutant | Before | After | Change |
|------------------|--------|-------|--------|
| Acetaldehyde | 1.33 | 1.33 | - |
| Allyl chloride * | 0.04 | 0.04 | - |
| Chloroethane * | NR | 0.68 | + 0.68 |
| Ethylene glycol | 8.72 | 9.94 | + 1.22 |
| Ethylene oxide * | 3.71 | 3.71 | - |
| Formaldehyde | 0.20 | 0.20 | - |
| Methanol | 0.91 | 1.32 | + 0.41 |
| Vinyl chloride | 0.00 | 0.00 | - |
| Total | 14.91 | 17.22 | + 2.31 |

Other VOC (TPY): 33.15

- * Chloroethane was inadvertently omitted from the previous application. Chloroethane is a Class II toxic air pollutant and the increase is less than its minimum emission rate (MER).

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VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

| Pollutant | Before | After | Change |
|-------------------------|--------------|--------------|---------------|
| Acetaldehyde | 1.33 | 1.39 | + 0.06 |
| Allyl chloride | 0.04 | 0.04 | - |
| Chloroethane | 0.68 | 0.02 | - 0.66 |
| Ethylene glycol | 9.94 | 10.90 | + 0.96 |
| Ethylene oxide | 3.71 | 4.07 | + 0.36 |
| Formaldehyde | 0.20 | 0.22 | + 0.02 |
| Methanol | 1.32 | 1.32 | - |
| Vinyl chloride | - | 0.01 | + 0.01 |
| Methyl chloride | - | 0.01 | + 0.01 |
| Total | 17.22 | 17.98 | + 0.76 |
| Other VOC (TPY): | | 33.97 | |

IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS) and NESHAP. New Source Review is not required.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Acetaldehyde, allyl chloride, ethylene oxide, and formaldehyde emissions are above the minimum emission rates (MER) under Louisiana Air Toxic Regulations. Process vents containing acetaldehyde, ethylene oxide, and formaldehyde shall comply with maximum achievable control technology (MACT) requirements by maintaining the total resource effectiveness (TRE) index values above 4.0 (Group 2 vents only) in accordance with NESHAP (HON) Subpart G - National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

Fugitive emissions from equipment containing organic hazardous air pollutants are monitored under the leak detection and repair (LDAR) requirements of NESHAP (HON) Subpart H – National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

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The impact of pollutants on air quality is below toxic ambient air standards (AAS) and national ambient air quality standards (NAAQS). The air toxic compliance plan was approved by LDEQ on August 31, 1995 and incorporated in the permit.

The facility is increasing ethylene oxide, a toxic air pollutant (TAP), emissions more than its minimum emission rate (MER).

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment (under LAC 33:III.5107.D) on the proposed permit was published in *The Advocate*, Baton Rouge and in the *The Gonzales Weekly*, Geismar, Louisiana, on May **, 2010. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on May **, 2010. All comments will be considered prior to the final permit decision.

VII. Effects on Ambient Air

Dispersion Model(s) Used: ISCST3

| Pollutant | Time Period | Calculated Maximum Ground Level Concentration | Louisiana Air Quality Standard (NAAQS) |
|----------------|-------------|---|--|
| Ethylene Oxide | Annual | 11.51 ug/m ³ | 1.0 ug/m ³ |

The conservative modeling analysis indicated that the calculated maximum ground level concentration for ethylene Oxide is 11.51 ug/m³. This concentration exceeded the annual

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AAS of 1.0 ug/m³ under the state requirement. Further analysis indicated that these exceedances occurred on industrial properties, roads, a railroad that intersects the facility, property that is zoned industrial and owned by another party, and the river (uninhibited or restricted access). Since the exceedances are on the uninhibited and restricted access property; the maximum calculated ground level concentration of 388 ug/m³ (8-hour period) was compared with OSHA standard (8-hour Time Weighted Average) of 1800 ug/m³ for Ethylene Oxide. This demonstrated that the modeling results show compliance with the OSHA standards. Based on this conclusion LDEQ concurs that there will not be any adverse effect on the workers health.

VIII. General Condition XVII Activities

| Activity | Frequency | VOC | PM10 | SO2 | NOx | CO |
|--------------------------------|------------------------|------|------|------|------|------|
| | | TPY | TPY | | | |
| EO-2 Shutdown Purges | 150,050 cu. ft/yr | 0.02 | - | | | |
| EO-2 Daily Maintenance | 6 purges/equipment/yr | 0.02 | - | | | |
| EG-2 Shutdown Purges | 100,050 cu. ft/yr | 0.02 | - | | | |
| EG-2 Daily Maintenance | 12 purges/equipment/yr | 0.02 | - | | | |
| EG-2 Pretreatment System Purge | 18 days/yr | 0.09 | - | | | |
| EOEG-2 Reactor Purge | 5 purges/yr | 0.62 | | | | |
| Large Fuel Fired Equipment | 500 hp * 600 hrs | 0.38 | 0.33 | 0.31 | 4.65 | 1.00 |
| Small Fuel Fired Equipment | 50 hp *6000 hrs | 0.38 | 0.33 | 0.31 | 4.65 | 1.00 |

* The Spark Ignition Internal Combustion Engine (lean burn) shall have been manufactured before January 1, 2008. NSPS, 40 CFR 60, Subpart JJJJ [40 CFR 60.4230(a)]

IX. Insignificant Activities

| ID No.: | Description | Citation |
|---------|-------------|------------------------|
| - | Lab Vents | LAC 33:III.501.B.5.A.6 |

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X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | LAC 33:III.Chapter | | | | | | | | | | | | | | | | | |
|---------|----------------------------------|--------------------|---|----|----|----|------|------|------|------|------|------|----|----|-----|-----|----|----|----|
| | | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 | 59 |
| GRP28 | EOEG-2 Facility | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EQT12 | 01A-85, DEG Rundown Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT14 | 01C-85, TEG Rundown Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT16 | 02-86, ISOPAR-L Storage Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT19 | 03-77, EO-2 Cooling Tower | | | | | | | | | | | | | 1 | | | | | |
| EQT20 | 03-91, Lean Absorbent Surge Tank | | | | | | | | | | | | 2 | | | | | | 1 |
| EQT21 | 04-91, Brine Surge Tank | | | | | | | | | | | | 1 | | | | | | 1 |
| EQT22 | 04A-77, EG Flasher Bottoms Tank | | | | | | | | | | | | 2 | | | | | | 1 |
| EQT23 | 04B-77, ISOPAR-G Storage Tank | | | | | | | | | | | | 2 | | | | | | 1 |
| EQT24 | 04C-77, EG Rerun Tank | | | | | | | | | | | | 2 | | | | | | 1 |
| EQT25 | 04D-77, EG Rundown Tank | | | | | | | | | | | | 2 | | | | | | 1 |
| EQT26 | 04E-77, EG Rundown Tank | | | | | | | | | | | | 2 | | | | | | 1 |
| EQT27 | 04F-77, DEG Rundown Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT28 | 04G-77, DEG Rundown Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT29 | 04H-77, TEG Rundown Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT30 | 04I-77, TEG Rundown Tank | | | | | | | | | | | | 2 | | | | | | |
| EQT33 | 06-91, Process Analyzers EO-2 | | | | | | | | | | | | | | | | | 1 | |

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| | | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 |
| EQT34 | 10-91, EO1&2 Brine Surge Tank | | | | | | 1 | | | | | | | | | 1 | | |
| EQT35 | 15A2-71, EG Rundown Tank | | | | | | | | 2 | | | | | | | 1 | | |
| EQT38 | 15D2-71, EG Rundown Tank | | | | | | | | 2 | | | | | | | 1 | | |
| EQT39 | 15S3-71, ISOPAR-L Storage | | | | | | | | | 2 | | | | | | | | |
| EQT40 | 15T1-71, EG Rerun Tank | | | | | | | | 2 | | | | | | | 1 | | |
| EQT41 | 15U1-71, EG Rundown Tank | | | | | | | | 2 | | | | | | | 1 | | |
| EQT42 | 15V1-71, Carbonate Tank | | | | | | | | | 2 | | | | | | | | |
| EQT46 | 55-87, TEG Bottoms Storage | | | | | | | | | 2 | | | | | | | | |
| EQT47 | 56-87, TEG Bottoms Storage | | | | | | | | | 2 | | | | | | | | |
| EQT48 | 59A-86, EO Tank Car Vent Absorber | | | | | | | | | 1 | | | 2 | | 2 | | 1 | |
| EQT49 | 62A-88, EO/EG Backup Gen. Driver | | | | | | | | | 1 | | | | | | | | |
| EQT50 | 62B-88, Diesel Storage | | | | | | | | | | 2 | | | | | | | |
| EQT51 | 104-00, GBF & TEG Bottoms T/T Loading | | | | | | | | | | | | | | | 1 | | |
| EQT52 | 04N-77, EO Storage Vessel | | | | | | | | | | | | | | | 1 | | |
| EQT53 | 04P-77, EO Storage Vessel | | | | | | | | | | | | | | | 1 | | |
| EQT54 | 04Q-77, EO Storage Vessel | | | | | | | | | | | | | | | 1 | | |
| EQT55 | 04S-77, EO Storage Vessel | | | | | | | | | | | | | | | 1 | | |

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| | | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 | 59 |
| EQT56 | 15T3-71, EO Storage Vessel | | | | | | | | | | | | | | | | | | 1 |
| EQT57 | 15U3-71, EO Storage Vessel | | | | | | | | | | | | | | | | | | 1 |
| EQT58 | 15V3-71, EO Storage Vessel | | | | | | | | | | | | | | | | | | 1 |
| EQT59 | 15W3-71, EO Storage Vessel | | | | | | | | | | | | | | | | | | 1 |
| EQT60 | 15X3-71, SO Storage Vessel | | | | | | | | | | | | | | | | | | 1 |
| EQT61 | 15Y3-71, EO Storage Vessel | | | | | | | | | | | | | | | | | | 1 |
| EQT62 | CWHE003, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT63 | CWHE004, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT65 | CWHE005, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT66 | CWHE006, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT67 | CWHE007, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT68 | CWHE008, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT69 | CWHE012, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT70 | CWHE013, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT71 | CWHE014, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT72 | CWHE024, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT73 | CWHE028, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |
| EQT74 | CWHE029, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | 1 |

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| | | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 |
| EQT75 | CWHE030, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | |
| EQT76 | CWHE031, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT77 | CWHE032, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT78 | CWHE033, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT79 | CWHE034, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT80 | CWHE035, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT81 | CWHE036, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT82 | CWHE037, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT83 | CWHE038, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT84 | CWHE039, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT85 | CWHE040, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT86 | CWHE041, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT87 | CWHE042, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT88 | CWHE043, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT89 | CWHE044, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT90 | CWHE045, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT91 | CWHE046, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT92 | CWHE047, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |

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| | | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 |
| EQT93 | CWHE048, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT94 | CWHE049, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT95 | CWHE050, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT96 | CWHE051, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT97 | CWHE052, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT98 | CWHE053, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT99 | CWHE054, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT100 | CWHE055, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT101 | CWHE056, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT102 | CWHE057, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT103 | CWHE058, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT104 | CWHE059, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT105 | CWHE060, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT106 | CWHE061, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT107 | CWHE062, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 1 |
| EQT108 | NNN-01, Column | | | | | | | | | | | | | | | | | 1 |
| EQT109 | NNN-46, Column | | | | | | | | | | | | | | | | | |
| EQT110 | PWW-04, Process Wastewater | | | | | | | | | | | | | | | | | |

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|---------|--|--------------------|---|----|----|----|------|------|------|------|------|------|----|----|-----|-----|----|----|
| | | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 |
| EQT111 | PWW-05, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT112 | PWW-06, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT113 | PWW-07, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT114 | PWW-08, EO Blowdown | | | | | | | | | | | | | | | | | 1 |
| EQT115 | PWW-09, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT116 | PWW-10, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT117 | PWW-11, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT118 | PWW-12, Process Wastewater | | | | | | | | | | | | | | | | | 1 |
| EQT119 | PWW-22, EO2 Oxidizer K.O. Pot | | | | | | | | | | | | | | | | | 1 |
| EQT120 | PV-04, Process Vent | | | | | | | | | | | | | | | | | 1 |
| EQT121 | PV-05, Process Vent | | | | | | | | | | | | | | | | | 1 |
| EQT122 | PV-06, Process Vent | | | | | | | | | | | | | | | | | 1 |
| EQT123 | PV-07, Process Vent | | | | | | | | | | | | | | | | | 1 |
| EQT124 | PV-15, Process Vent | | | | | | | | | | | | | | | | | 1 |
| EQT125 | 60-86, Flasher Tops Accum. | | | | | | | | | | | | | | | | | 1 |
| EQT772 | 18-96, Contaminated Steam Vent A-E0503 | | | | | | | | | | | | | | | | | 2 |
| FUG3 | 55C-88, Fugitive Emissions EG2 | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | 1 |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOU

X. Applicable Louisiana and Federal Air Quality Requirements

| X. Applicable Louisiana and Federal Air Quality Requirements | | | | | | | | | | | | | | | | | | | |
|--|---|--------------------|---|----|----|----|------|------|------|------|------|------|----|----|-----|-----|----|----|----|
| | | LAC 33:III.Chapter | | | | | | | | | | | | | | | | | |
| ID No.: | Description | 5 | 9 | 11 | 13 | 15 | 2103 | 2104 | 2107 | 2111 | 2115 | 2116 | 21 | 22 | 29* | 51* | 53 | 56 | 59 |
| FUG4 | 55D-88, Fugitive Emissions EG2 | | | | | | | | | 1 | | | 1 | | | | | | |
| FUG5 | 55E-88, Fugitive Emissions EO/EG Tank Farm | | | | | | | | | 1 | | | 1 | | | | | | |
| RLP28 | 17-96, Contaminated Steam Vent EG | | | | | | | | | 1 | | | 1 | | | | | | |
| RLP31 | 20-96, EO-2 Sour Oil Gas Vent | | | | | | | | | 1 | | | 1 | | | | | | |
| RLP34 | 23A-96, EG-2 Hotwell Vent | | | | | | | | | | | | 1 | | | | | | |
| RLP35 | 26-98, EG2 GBF/Prif Vac Aftercond Vent | | | | | | | | | | 2 | | 2 | | | | | | |
| RLP36 | 27-98, EG2 DEG Col Vac Aftercond Vent | | | | | | | | | | 2 | | 2 | | | | | | |
| RLP37 | 41-91, EO Effluent Pretreat Feed Tank Scrubber Vent | | | | | | | | | | | | 2 | | | | | | |
| RLP39 | 64-86, EO2 700 Vent | | | | | | | | | | | | 2 | | | | | | |
| RLP41 | 97-00, EO-2 Oxidizer Vent | | | | | | | | | | | | 1 | | | | | | |

* The regulations indicated above are State Only regulations.

▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the regulations indicated above are State Only regulations.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

KEY TO MATRIX

- 1 - The regulations have applicable requirements which apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
Blank – The regulations clearly do not apply to this type of emission source.
LAC 33:III.Chapter 29 and 51 – STATE ONLY requirements.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | | 40 CFR 61 | | | | 40 CFR 63 NESHAP | | | | 40 CFR | | | | |
|---------|----------------------------------|----------------|----|----|----|-----------|-----|---|---|------------------|----|---|---|--------|---|---|----|----|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 |
| GRP28 | EOEG-2 Facility | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 2 | 1 |
| EQT12 | 01A-85, DEG Rundown Tank | | | | | 2 | | | | | | | | | | 2 | 2 | |
| EQT14 | 01C-85, TEG Rundown Tank | | | | | 2 | | | | | | | | | | 2 | 2 | |
| EQT16 | 02-86, ISOPAR-L Storage Tank | | | | | 2 | | | | | | | | | | 2 | | |
| EQT19 | 03-77, EO-2 Cooling Tower | | | | | | | | | | | | | | | 1 | | |
| EQT20 | 03-91, Lean Absorbent Surge Tank | | | | | | | | | | | | | | | 1 | | |
| EQT21 | 04-91, Brine Surge Tank | | | | | 2 | | | | | | | | | | 1 | | |
| EQT22 | 04A-77, EG Flasher Bottoms Tank | | | | | 2 | | | | | | | | | | 1 | | |
| EQT23 | 04B-77, ISOPAR-G Storage Tank | | | | | 2 | | | | | | | | | | 2 | 2 | |
| EQT24 | 04C-77, EG Rerun Tank | | | | | 2 | | | | | | | | | | 1 | | |
| EQT25 | 04D-77, EG Rundown Tank | | | | | 2 | | | | | | | | | | 1 | | |
| EQT26 | 04E-77, EG Rundown Tank | | | | | 2 | | | | | | | | | | 1 | | |
| EQT27 | 04F-77, DEG Rundown Tank | | | | | 2 | | | | | | | | | | 2 | 2 | |
| EQT28 | 04G-77, DEG Rundown Tank | | | | | 2 | | | | | | | | | | 2 | 2 | |
| EQT29 | 04H-77, TEG Rundown Tank | | | | | 2 | | | | | | | | | | 2 | 2 | |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | | | | 40 CFR 61 | | | | | | 40 CFR 63 NESHAP | | | | | | 40 CFR | | | | | |
|---------|---------------------------------------|----------------|----|----|----|-----|-----|-----------|---|---|----|---|---|------------------|---|---|----|----|----|--------|--|--|--|--|--|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 | 68 | | | | | | |
| EQT30 | 04I-77, TEG Rundown Tank | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | |
| EQT33 | 06-91, Process Analyzers EO-2 | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | |
| EQT34 | 10-91, EO1&2 Brine Surge Tank | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| EQT35 | 15A2-71, EG Rundown Tank | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| EQT38 | 15D2-71, EG Rundown Tank | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| EQT39 | 15S3-71, ISOPAR-L Storage | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT40 | 15T1-71, EG Rerun Tank | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| EQT41 | 15U1-71, EG Rundown Tank | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| EQT42 | 15V1-71, Carbonate Tank | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | |
| EQT46 | 55-87, TEG Bottoms Storage | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | |
| EQT47 | 56-87, TEG Bottoms Storage | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | |
| EQT48 | 59A-86, EO Tank Car Vent Absorber | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT49 | 62A-88, EO/EG Backup Gen. Driver | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT50 | 62B-88, Diesel Storage | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | |
| EQT51 | 104-00, GBF & TEG Bottoms T/T Loading | | | | | | | | | | | | | | | | 1 | | | | | | | | |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | | | | 40 CFR 61 | | | | | | 40 CFR 63 NESHAP | | | | | | 40 CFR | | | |
|---------|-----------------------------------|----------------|----|----|----|-----|-----|-----------|---|---|----|---|---|------------------|---|---|----|----|----|--------|--|--|--|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 | 68 | | | | |
| EQT52 | 04N-77, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT53 | 04P-77, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT54 | 04Q-77, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT55 | 04S-77, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT56 | 15T3-71, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT57 | 15U3-71, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT58 | 15V3-71, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT59 | 15W3-71, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT60 | 15X3-71, SO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT61 | 15Y3-71, EO Storage Vessel | | | | | | | | | | | | | | | | 2 | 2 | | | | | |
| EQT62 | CWHE003, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 2 | | | | | |
| EQT63 | CWHE004, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 2 | | | | | |
| EQT65 | CWHE005, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 2 | | | | | |
| EQT66 | CWHE006, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 2 | | | | | |
| EQT67 | CWHE007, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 2 | | | | | |
| EQT68 | CWHE008, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | 2 | | | | | |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | | | | 40 CFR 61 | | | | | | 40 CFR 63 NESHAP | | | | | | 40 CFR | | | | | |
|---------|-----------------------------------|----------------|----|----|----|-----|-----|-----------|---|---|----|---|---|------------------|---|---|----|----|----|--------|--|--|--|--|--|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 | 68 | | | | | | |
| EQT69 | CWHE012, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT70 | CWHE013, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT71 | CWHE014, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT72 | CWHE024, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT73 | CWHE028, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT74 | CWHE029, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT75 | CWHE030, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT76 | CWHE031, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT77 | CWHE032, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT78 | CWHE033, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| EQT79 | CWHE034, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT80 | CWHE035, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT81 | CWHE036, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT83 | CWHE038, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT84 | CWHE039, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| EQT85 | CWHE040, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | | | | | | | | |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | | | | 40 CFR 61 | | | | | | 40 CFR 63 NESHAP | | | | | | 40 CFR | | | |
|---------|-----------------------------------|----------------|----|----|----|-----|-----|-----------|---|---|----|---|---|------------------|---|---|----|----|----|--------|--|--|--|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 | 68 | | | | |
| EQT86 | CWHE041, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT87 | CWHE042, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT88 | CWHE043, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT89 | CWHE044, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT90 | CWHE045, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT91 | CWHE046, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT92 | CWHE047, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT93 | CWHE048, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT94 | CWHE049, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT95 | CWHE050, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT96 | CWHE051, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT97 | CWHE052, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT98 | CWHE053, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT99 | CWHE054, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT100 | CWHE055, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT101 | CWHE056, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT102 | CWHE057, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |
| EQT103 | CWHE058, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | | | | | | |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | 40 CFR 61 | | | 40 CFR 63 NESHAP | | | 40 CFR | | | | | | | |
|---------|-----------------------------------|----------------|----|----|-----------|-----|-----|------------------|---|---|--------|---|---|---|---|---|----|----|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 |
| EQT104 | CWHE059, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | | |
| EQT105 | CWHE060, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | |
| EQT106 | CWHE061, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | |
| EQT107 | CWHE062, Cooling Water Heat Exch. | | | | | | | | | | | | | | | | 2 | |
| EQT108 | NNN-01, Column | | | | | | | | | | | | | | | | | |
| EQT109 | NNN-46, Column | | | | | | | | | | | | | | | | | |
| EQT110 | PWW-04, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT111 | PWW-05, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT112 | PWW-06, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT113 | PWW-07, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT114 | PWW-08, EO Blowdown | | | | | | | | | | | | | | | | 1 | |
| EQT115 | PWW-09, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT116 | PWW-10, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT117 | PWW-11, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT118 | PWW-12, Process Wastewater | | | | | | | | | | | | | | | | 1 | |
| EQT119 | PWW-22, EO2 Oxidizer KO Pot | | | | | | | | | | | | | | | | 1 | |
| EQT120 | PV-04, Process Vent | | | | | | | | | | | | | | | | 2 | 2 |
| EQT121 | PV-05, Process Vent | | | | | | | | | | | | | | | | 2 | 2 |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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X. Applicable Louisiana and Federal Air Quality Requirements

| ID No.: | Description | 40 CFR 60 NSPS | | | | 40 CFR 61 | | | | 40 CFR 63 NESHAP | | | | 40 CFR | | | | |
|---------|---|----------------|----|----|----|-----------|-----|---|---|------------------|----|---|---|--------|---|---|----|----|
| | | K | Ka | Kb | Db | RRR | NNN | A | J | M | FF | A | F | G | H | Q | 52 | 64 |
| EQT122 | PV-06, Process Vent | | | | | 2 | 2 | | | | | | | | | 2 | 2 | |
| EQT123 | PV-07, Process Vent | | | | | 2 | 2 | | | | | | | | | 2 | 2 | |
| EQT124 | PV-15, Process Vent | | | | | 2 | 2 | | | | | | | | | 1 | | |
| EQT125 | 60-68, Flasher Tops Accum. | | | | | 2 | 1 | | | | | | | | | 1 | | |
| FUG3 | 55C-88, Fugitive Emissions EO2 | | | | | | | | | | | | | | | 1 | | |
| FUG4 | 55D-88, Fugitive Emissions EG2 | | | | | | | | | | | | | | | 1 | | |
| FUG5 | 55E-88, Fugitive Emissions EO/EG Tank Farm | | | | | | | | | | | | | | | 1 | | |
| RLP28 | 17-96, Contaminated Steam Vent EG | | | | | 2 | 2 | | | | | | | | | 2 | 2 | |
| RLP31 | 20-96, EO-2 Sour Oil Gas Vent | | | | | 2 | 2 | | | | | | | | | 2 | 2 | |
| RLP34 | 23A-96, EG-2 Hotwell Vent | | | | | | | | | | | | | | | 2 | 2 | |
| RLP35 | 26-98, EG2 GBF/Purif Vac Aftercond Vent | | | | | 2 | 1 | | | | | | | | | 2 | 2 | |
| RLP36 | 27-98, EG2 DEG Col Vac Aftercond Vent | | | | | 2 | 2 | | | | | | | | | 1 | 1 | |
| RLP37 | 41-91, EO Effl Pretreat Fd Tank Scrubber Vent | | | | | | | | | | | | | | | 2 | 2 | |
| RLP39 | 64-86, EO2 700 Vent | | | | | | | | | | | | | | | 1 | | |
| RLP41 | 97-00, EO-2 Oxidizer Vent | | | | | | | | | | | | | | | 1 | | |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

KEY TO MATRIX

- 1 - The regulations have applicable requirements which apply to this particular emission source.
 - 2 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
 - 3 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
 - 4 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

XI. Explanation for Exemption Status or Non-Applicability of a Source

| ID No: | Requirement | Notes |
|---|--|--|
| GRP28 | 40 CFR 64, Compliance Assurance Monitoring (CAM), 40 CFR 64(a)(1), (a)(2), (a)(3) and (b)(1)(i) | Not applicable or exempt: No control device and/or controlled/uncontrolled emissions less than the major source threshold and/or not subject to any limitation and/or regulation promulgated after November 15, 1990 |
| EQT12-16, 20, 22-30, 35, 38-42, 46, 47 and 50 | LAC 33:III.2103, Storage of VOC | Not applicable. The true vapor pressure of stored material is less than 1.5 psia. |
| EQT 48 and 772 RLP35, 36, 37 and 39 | LAC 33:III.2115, Waste Gas Disposal | Exempt. The stream has a combined weight of VOCs less than 100 lbs in any 24 hour period. [LAC 33:III.2115.H.1.c.] |
| EQT124 and 125 | LAC 33:III.2115, Waste Gas Disposal | Not applicable. This vent is subject to 40 CFR 60 Subpart NNN and 40 CFR 63 Subpart G. |
| EQT 48 and 125 RLP35 and 36 | | |
| EQT22-26, 35, 38-42, 46, 47 and 52-61 | NSPS Subpart Kb, VOL Storage Vessels, 40 CFR 60.110b(b) | Not applicable. The tanks were not constructed, reconstructed, or modified since July 23, 1984 |
| EQT12, 14, 16, 21, 27-30, 34 and 50 | NSPS Subpart Kb, VOL Storage Vessels, 40 CFR 60.110b(b) | Not applicable. The tanks capacity and vapor pressure less than the requirements of this regulation. |
| EQT 120-124, 772 RLP28, 31, 36 and 39 | NSPS Subpart NNN, Standards of Performance for VOC Emissions from SOCMI Distillation Operations, 40 CFR 60.660 | Not applicable. Not constructed, reconstructed or modified since December 30, 1983. |

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SHELL CHEMICAL LP
AGENCY INTEREST NO.: 1136
EOEG-2, GEISMAR PLANT
GEISMAR, ASCENSION PARISH, LOUISIANA

XI. Explanation for Exemption Status or Non-Applicability of a Source

| ID No: | Requirement | Notes |
|--|--|--|
| EQT 120-125, 772 RLP28, 31, 35, 36 and 39 | NSPS Subpart RRR, Standards of Performance for VOC Emissions from SOCM1 Reactor Processes, 40 CFR 60.700 | Not applicable. Not constructed, reconstructed or modified since June 29, 1990. |
| EQT12, 14, 16, 23, 27- 30, 39, 42, 46-48, 50, 52- 61 and 120-123 RLP28, 31, 34 and 37 | NESHAP Subpart F and G, NESHAP from the SOCM1 and from the SOCM1 for Process Vents, Storage Vessels, Transfer Operations and Wastewater, 40 CFR 63.100 and 110 | Not applicable. The tanks, vents and loading racks do not meet the definition in 40 CFR 63.101 and 111. |
| EQT62, 63, 65-107 | NESHAP, Subpart F, Fro, SOCM1 | See "Specific Requirements" |
| EQT772 | LAC 33:III.2147, VOC Emissions From Reactor Processes and Distillation Operations in the SOCM1 | Not applicable. This vent does not originate from a distillation or reactor process and is not subject to 40 CFR 63 Subpart G. |
| | | |

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section VII of this permit.

General Information

AI ID: 1136 Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

| Also Known As: | ID | Name | User Group | Start Date |
|-----------------|-------------------|--|-------------------------------------|------------------------------------|
| | 0180-00010 | Shell Chemical Co - Geismar Plant | CDS Number | 08-22-2002 |
| | 13-1289890 | Federal Tax ID | Federal Tax ID | 11-21-1999 |
| | LAD003913183 | Shell Chemical Co - Geismar Plant | Hazardous Waste Notification | 09-02-1983 |
| | LAD003913183 | Shell Chemical Co - Geismar Plant | Inactive & Abandoned Sites | 06-09-1981 |
| | LA0005754 | LPDES # | LPDES Permit # | 08-25-2003 |
| | WP1347 | LWDPS # | LWDPS Permit # | 08-25-2003 |
| | | Priority 1 Emergency Site | Priority 1 Emergency Site | 07-18-2006 |
| | | Radioactive Material License | Radiation License Number | 05-26-1987 |
| | | X-Ray Registration Number | Radiation X-ray Registration Number | 11-21-1999 |
| | | Site ID # | Solid Waste Facility No. | 11-21-1999 |
| | LA-2132-L01 | Shell Chemical Co - Geismar Works | TEMPO Merge | 01-19-2001 |
| | 2132 | Shell Chemical LP - Geismar | TEMPO Merge | 08-05-2001 |
| | G-005-1740 | Shell Chemical Co | TEMPO Merge | 08-05-2001 |
| | 17631 | Shell Chemical Co | TEMPO Merge | 03-08-2001 |
| | 34601 | Shell Chemical Co | TEMPO Merge | 08-05-2001 |
| | 38774 | TRI # | Toxic Release Inventory | 07-19-2004 |
| | 47981 | UST Facility ID # | UST FID # | 10-11-2002 |
| | | | Main Phone: | 2253016222 |
| | | | | |
| | | Physical Location: Geismar, LA 70734 | | |
| | | | | |
| | | Mailing Address: PO Box 500 Geismar, LA 707340500 | | |
| | | Location of Front Gate: 30.185139 latitude, -90.987611 longitude, Coordinate Method: Lat/Long, - DMS, Coordinate Datum: NAD83 | | |
| Related People: | Name | Mailing Address | Phone (Type) | Relationship |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016324 (WP) | Hazardous Waste Permit Contact For |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016324 (WP) | Water Billing Party for |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016324 (WP) | Water Permit Contact For |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016030 (WF) | Water Permit Contact For |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016030 (WF) | Water Billing Party for |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016324 (WP) | Hazardous Waste Permit Contact For |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016030 (WF) | Asbestos Contact for |
| | Anne Adrian | 7594 Hwy 75 Geismar, LA 70737 | 2252016586 (WP) | Asbestos Contact for |
| | Lorraine Anderson | PO Box 500 Geismar, LA 707340500 | 2252016586 (WP) | Emission Inventory Contact for |

General Information

AI ID: 1136 Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

| Related People: | Name | Mailing Address | Phone (Type) | Relationship |
|------------------------|--------------------|-----------------------------------|-------------------|--|
| | Lorraine Anderson | PO Box 500 Geismar, LA 707340500 | LORRAINE ANDERSON | Emission Inventory Contact for |
| | Gerald Brouillette | PO Box 500 Geismar, LA 707340500 | GERALD BROUILLE | Accident Prevention Billing Party for |
| | Gerald Brouillette | PO Box 500 Geismar, LA 707340500 | 2252016030 (WF) | Accident Prevention Billing Party for |
| | Gerald Brouillette | PO Box 500 Geismar, LA 707340500 | 2252016207 (WP) | Accident Prevention Billing Party for |
| | Gerald Brouillette | PO Box 500 Geismar, LA 707340500 | 2252016207 (WP) | Air Permit Contact For |
| | Gerald Brouillette | PO Box 500 Geismar, LA 707340500 | 2252016030 (WF) | Air Permit Contact For |
| | Gerald Brouillette | PO Box 500 Geismar, LA 707340500 | GERALD BROUILLE | Air Permit Contact For |
| | Glenn Bucholz | PO Box 500 Geismar, LA 707340500 | 2252016456 (WP) | Responsible Official for |
| | Robert Evans | PO Box 500 Geismar, LA 707340500 | 2252016456 (WP) | Responsible Official for |
| | Robert Evans | PO Box 500 Geismar, LA 707340500 | 2252016782 (WP) | Radiation Contact For |
| | Kathleen Garay | PO Box 500 Geismar, LA 707340500 | 2252016782 (WP) | Radiation Safety Officer for |
| | Kathleen Garay | PO Box 500 Geismar, LA 707340500 | 2252016882 (WF) | Accident Prevention Contact for |
| | Production Manager | 7594 Hwy 75 Geismar, LA 707340500 | | Accident Prevention Contact for |
| | Steve Rathweg | PO Box 500 Geismar, LA 707340500 | 2252016588 (WP) | Responsible Official for |
| | | | | Responsible Official for |
| Related Organizations: | Name | Address | Phone (Type) | Relationship |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | Operates |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | Owns |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | Radiation Registration Billing Party for |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | Emission Inventory Billing Party |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | Radiation License Billing Party for |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | UST Billing Party for |
| | Shell Chemical LP | PO Box 500 Geismar, LA 707340500 | 2252016247 (WP) | Air Billing Party for |

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Ms. Tommie Milam, Permit Support Services Division, at (225) 219-3259 or email your changes to fscupdate@la.gov.

INVENTORIES

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

| ID | Description | Tank Volume | Max. Operating Rate | Normal Operating Rate | Contents | Operating Time |
|--------------------|--|-------------------|---------------------|-----------------------|----------|----------------|
| E0EG-2 Unit | | | | | | |
| EQT 0012 | 01A-85 - DEG Rundown Tank T-EG930 (EG-2) | 16450.52 gallons | | 5.45 MM gallons/yr | | 8760 hr/yr |
| EQT 0014 | 01C-85 - TEG Rundown Tank T-EG930 (EG-2) | 16450.52 gallons | | 788811 gallons/yr | | 8760 hr/yr |
| EQT 0016 | 02-86 - ISOPAR-L Storage Tank T-EO913 | 93239.21 gallons | | 839030 gallons/yr | | 8760 hr/yr |
| EQT 0019 | 03-77 - EO-2 Cooling Tower W-EO601/7/23 | | | 15400 gallons/min | | 8760 hr/yr |
| EQT 0020 | 03-91 - Lean Absorbent Surge Tank T-EO600 | 81102 gallons | | 884768 gallons/yr | | 8760 hr/yr |
| EQT 0021 | 04-91 - Brine Surge Tank T-EO633 (EO-2) | 10575.33 gallons | | 26436 gallons/yr | | 8760 hr/yr |
| EQT 0022 | 04A-77 - EG Flasher Bottoms Storage T-EG911 | 57108.81 gallons | | 28.13 MM gallons/yr | | 8760 hr/yr |
| EQT 0023 | 04B-77 - ISOPAR-G Storage T-EO912 | 57108.81 gallons | | 513930 gallons/yr | | 8760 hr/yr |
| EQT 0024 | 04C-77 - EG Rerun Tank T-EG923 (EG-2) | 93239 gallons | | 1.2 MM gallons/yr | | 8760 hr/yr |
| EQT 0025 | 04D-77 - EG Rundown Tank T-EG924 (EG-1) | 93239.2 gallons | | 18.87 MM gallons/yr | | 8760 hr/yr |
| EQT 0026 | 04E-77 - EG Rundown Tank T-EG925 (EG-1) | 93239.2 gallons | | 16.87 MM gallons/yr | | 8760 hr/yr |
| EQT 0027 | 04F-77 - DEG Rundown Tank T-EG831 (EG-2) | 6016.19 gallons | | 3.83 MM gallons/yr | | 8760 hr/yr |
| EQT 0028 | 04G-77 - DEG Rundown Tank T-EG832 (EG-2) | 6016.19 gallons | | 2.07 MM gallons/yr | | 8760 hr/yr |
| EQT 0029 | 04H-77 - TEG Rundown Tank T-EG938 (EG-2) | 6016 gallons | | 532541 gallons/yr | | 8760 hr/yr |
| EQT 0030 | 04I-77 - TEG Rundown Tank T-EG939 (EG-2) | 6016 gallons | | 532541 gallons/yr | | 8760 hr/yr |
| EQT 0033 | 08-91 - Process Analyzer EO-2 | | | 2000 hr/yr | | |
| EQT 0034 | 10-91 - EO-1&2 Brine Surge Tank T-EO810 | 6016.19 gallons | | 14664 gallons/yr | | 8760 hr/yr |
| EQT 0035 | 15A2-71 - EG Rundown Tank T-EG891 (EG-2) | 282008.94 gallons | | 27.37 MM gallons/yr | | 8760 hr/yr |
| EQT 0038 | 15D2-71 - EG Rundown Tank T-EG992 (EG-2) | 156830 gallons | | 27.37 MM gallons/yr | | 8760 hr/yr |
| EQT 0039 | 15S3-71 - ISOPAR-L Storage T-EO910 | 126904 gallons | | 1.11 MM gallons/yr | | 8760 hr/yr |
| EQT 0040 | 15T1-71 - EG Rerun Tank T-EG922 (EG-1) | 37014 gallons | | 1.2 MM gallons/yr | | 8760 hr/yr |
| EQT 0041 | 15U1-71 - EG Rundown Tank T-EG920 | 37014 gallons | | 17.25 MM gallons/yr | | 8760 hr/yr |
| EQT 0042 | 15V1-71 - Carbonate Tank T-EG921 (EO-1/2) | 37014 gallons | | 6.45 MM gallons/yr | | 8760 hr/yr |
| EQT 0046 | 56-87 - TEG Bottoms Storage T-EG993 (EG-123) | 14893 gallons | | 714919 gallons/yr | | 8760 hr/yr |
| EQT 0047 | 56-87 - TEG Bottoms Storage T-EG994 (EG-123) | 20380.8 gallons | | 714918 gallons/yr | | 8760 hr/yr |
| EQT 0048 | 58A-86 - EO Tank Car Vent Absorber C-EO605 | | | 1622 lb/hr | | 3833 hr/yr |
| EQT 0049 | 62A-88 - EO/E/G Backup Gen Driver Y-EO600 | 660 gallons | | 415 horsepower | | 416 hr/yr |
| EQT 0050 | 62B-88 - Diesel Storage Tank T-EO604 | 660 gallons | | 7825 gallons/yr | | 8760 hr/yr |
| EQT 0051 | 104-00 - GBF Bins & TEG Bins T/T Load Spot 8 | | | 35.58 MM gallons/yr | | 6570 hr/yr |
| EQT 0052 | 04N-77 - EO Storage Vessel V-EO988 | | | (None Specified) | | |
| EQT 0053 | 04P-77 - EO Storage Vessel V-EO988 | | | (None Specified) | | |
| EQT 0054 | 04Q-77 - EO Storage Vessel V-EO989 | | | (None Specified) | | |
| EQT 0055 | 04S-77 - EO Storage Vessel V-EO987 | | | (None Specified) | | |
| EQT 0056 | 15T3-71 - EO Storage Vessel V-EO890 | | | (None Specified) | | |
| EQT 0057 | 15U3-71 - EO Storage Vessel V-EO911 | | | (None Specified) | | |
| EQT 0058 | 15V3-71 - EO Storage Vessel V-EO992 | | | (None Specified) | | |
| EQT 0059 | 15W3-71 - EO Storage Vessel V-EO993 | | | (None Specified) | | |
| EQT 0060 | 15Y3-71 - EO Storage Vessel V-EO994 | | | (None Specified) | | |
| EQT 0061 | 15Y3-71 - EO Storage Vessel V-EO995 | | | (None Specified) | | |

INVENTORIES

AI ID: 1138 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

| ID | Description | Tank Volume | Max. Operating Rate | Normal Operating Rate | Contents | Operating Time |
|--------------------|--|-------------|---------------------|-----------------------|------------------|----------------|
| E0EG-2 Unit | | | | | | |
| EQT 0062 | CWHE003 - Cooling Water Heat Exchanger E-EO103 | | | | (None Specified) | |
| EQT 0063 | CWHE004 - Cooling Water Heat Exchanger E-EO104 | | | | (None Specified) | |
| EQT 0065 | CWHE005 - Cooling Water Heat Exchanger E-EO105 | | | | (None Specified) | |
| EQT 0066 | CWHE006 - Cooling Water Heat Exchanger E-EO140 | | | | (None Specified) | |
| EQT 0067 | CWHE007 - Cooling Water Heat Exchanger E-EO143 | | | | (None Specified) | |
| EQT 0068 | CWHE008 - Cooling Water Heat Exchanger E-EO203 | | | | (None Specified) | |
| EQT 0069 | CWHE012 - Cooling Water Heat Exchanger E-EO216 | | | | (None Specified) | |
| EQT 0070 | CWHE013 - Cooling Water Heat Exchanger E-EO220 | | | | (None Specified) | |
| EQT 0071 | CWHE014 - Cooling Water Heat Exchanger E-EO221 | | | | (None Specified) | |
| EQT 0072 | CWHE024 - Cooling Water Heat Exchanger EEO307 | | | | (None Specified) | |
| EQT 0073 | CWHE028 - Cooling Water Heat Exchanger A-EO608 | | | | (None Specified) | |
| EQT 0074 | CWHE029 - Cooling Water Heat Exchanger | | | | (None Specified) | |
| EQT 0075 | CWHE030 - Cooling Water Heat Exchanger E-EO503 | | | | (None Specified) | |
| EQT 0076 | CWHE031 - Cooling Water Heat Exchanger E-EO504 | | | | (None Specified) | |
| EQT 0077 | CWHE032 - Cooling Water Heat Exchanger E-EO603 | | | | (None Specified) | |
| EQT 0078 | CWHE033 - Cooling Water Heat Exchanger E-EO605 | | | | (None Specified) | |
| EQT 0079 | CWHE034 - Cooling Water Heat Exchanger | | | | (None Specified) | |
| EQT 0080 | CWHE035 - Cooling Water Heat Exchanger E-EO807 | | | | (None Specified) | |
| EQT 0081 | CWHE036 - Cooling Water Heat Exchanger E-EO808 | | | | (None Specified) | |
| EQT 0082 | CWHE037 - Cooling Water Heat Exchanger E-EO816 | | | | (None Specified) | |
| EQT 0083 | CWHE038 - Cooling Water Heat Exchanger E-EO617 | | | | (None Specified) | |
| EQT 0084 | CWHE039 - Cooling Water Heat Exchanger E-EO818 | | | | (None Specified) | |
| EQT 0085 | CWHE040 - Cooling Water Heat Exchanger E-EO819 | | | | (None Specified) | |
| EQT 0086 | CWHE041 - Cooling Water Heat Exchanger E-EO820 | | | | (None Specified) | |
| EQT 0087 | CWHE042 - Cooling Water Heat Exchanger E-EO621 | | | | (None Specified) | |
| EQT 0088 | CWHE043 - Cooling Water Heat Exchanger E-EO622 | | | | (None Specified) | |
| EQT 0089 | CWHE044 - Cooling Water Heat Exchanger E-EO623 | | | | (None Specified) | |
| EQT 0090 | CWHE045 - Cooling Water Heat Exchanger E-EO624 | | | | (None Specified) | |
| EQT 0091 | CWHE046 - Cooling Water Heat Exchanger E-EO625 | | | | (None Specified) | |
| EQT 0092 | CWHE047 - Cooling Water Heat Exchanger E-EO702 | | | | (None Specified) | |
| EQT 0093 | CWHE048 - Cooling Water Heat Exchanger E-EO705 | | | | (None Specified) | |
| EQT 0094 | CWHE049 - Cooling Water Heat Exchanger E-EO706 | | | | (None Specified) | |
| EQT 0095 | CWHE050 - Cooling Water Heat Exchanger E-EO707 | | | | (None Specified) | |
| EQT 0096 | CWHE051 - Cooling Water Heat Exchanger E-EO708 | | | | (None Specified) | |
| EQT 0097 | CWHE052 - Cooling Water Heat Exchanger E-EO709 | | | | (None Specified) | |
| EQT 0098 | CWHE053 - Cooling Water Heat Exchanger E-EO712 | | | | (None Specified) | |
| EQT 0099 | CWHE054 - Cooling Water Heat Exchanger E-EO713 | | | | (None Specified) | |
| EQT 0100 | CWHE055 - Cooling Water Heat Exchanger E-EO715 | | | | (None Specified) | |
| EQT 0101 | CWHE056 - Cooling Water Heat Exchanger E-EO716 | | | | (None Specified) | |

INVENTORIES

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057.V5
 Air - Title V Regular Permit Minor Mod

Subject Item Inventory:

| ID | Description | Tank Volume | Max. Operating Rate | Normal Operating Rate | Contents | Operating Time |
|--------------------|--|-------------|---------------------|-----------------------|------------------|----------------|
| E0EG-2 Unit | | | | | | |
| EQT 0102 | CWHE057 - Cooling Water Heat Exchanger E-EO717 | | | | (None Specified) | |
| EQT 0103 | CWHE058 - Cooling Water Heat Exchanger E-EO718 | | | | (None Specified) | |
| EQT 0104 | CWHE059 - Cooling Water Heat Exchanger E-EO202 | | | | (None Specified) | |
| EQT 0105 | CWHE060 - Cooling Water Heat Exchanger EG-1 | | | | (None Specified) | |
| EQT 0106 | CWHE61 - Cooling Water Heat Exchanger EG-2 | | | | (None Specified) | |
| EQT 0107 | CWHE062 - Cooling Water Heat Exchanger EOEG 12 | | | | (None Specified) | |
| EQT 0108 | NNN-01 - Column C-EO720 | | | | (None Specified) | |
| EQT 0109 | NNN-48 - Calcium C-EG503 | | | | (None Specified) | |
| EQT 0110 | PWW-04 - Process Wastewater V-EO205 | | | | (None Specified) | |
| EQT 0111 | PWW-05 - Process Wastewater V-EO303A | | | | (None Specified) | |
| EQT 0112 | PWW-06 - Process Wastewater V-EO202 | | | | (None Specified) | |
| EQT 0113 | PWW-07 - Process Wastewater V-EO201 | | | | (None Specified) | |
| EQT 0114 | PWW-08 - Blowdown W-EO101 | | | | (None Specified) | |
| EQT 0115 | PWW-09 - Process Wastewater V-EO605 | | | | (None Specified) | |
| EQT 0116 | PWW-10 - Process Wastewater V-EG505 | | | | (None Specified) | |
| EQT 0117 | PWW-11 - Process Wastewater V-EG801 | | | | (None Specified) | |
| EQT 0118 | PWW-12 - Process Wastewater V-EG741 | | | | (None Specified) | |
| EQT 0119 | PWW-22 - EO2 Oxidizer KO Pot | | | | (None Specified) | |
| EQT 0120 | PV-04 - Process Vent K-EO601 | | | | (None Specified) | |
| EQT 0121 | PV-05 - Process Vent K-EO604 | | | | (None Specified) | |
| EQT 0122 | PV-06 - Process Vent K-EO303A | | | | (None Specified) | |
| EQT 0123 | PV-07 - Process Vent K-EO703 | | | | (None Specified) | |
| EQT 0124 | PV-15 - Process Vent K-EO605 | | | | (None Specified) | |
| EQT 0125 | 60-86 - Flasher Tops Accum V-EG731 | | | | (None Specified) | |
| EQT 0772 | 18-96 - Contaminated Steam Vent A-EO503 | | | | 500 hr/yr | |
| FUG 0003 | 55C-88 - Fugitive Emissions EO2 | | | | 8760 hr/yr | |
| FUG 0004 | 55D-88 - Fugitive Emissions EG2 | | | | 8760 hr/yr | |
| FUG 0005 | 55E-88 - Fugitive Emissions EOEG Tank Farm | | | | 8760 hr/yr | |
| RLP 0028 | 17-98 - A-EG502 Contaminated Steam Vent | | | | 850 hr/yr | |
| RLP 0031 | 20-98 - EO-2 Sour Oil Gas Vent K-EO601 to atm | | | | 175 hr/yr | |
| RLP 0034 | 23A-98 - EG-2 Hotwell Vent V-EG801 | | | 500 lb/hr | 167 lb/hr | |
| RLP 0035 | 26-98 - EG2 GBF/Puri Vac Aftercond Vent E-EG801 | | | | 8760 hr/yr | |
| RLP 0036 | 27-98 - EG2 DEG Col Vac Aftercond Vent E-EG803 | | | | 8760 hr/yr | |
| RLP 0037 | 41-91 - EO Err Pfiltrat Fd Tk Scrub Vent C-EO620 | | | 5875 gallons | 8760 hr/yr | |
| RLP 0039 | 64-86 - EO2 700 Vent | | | | 500 lb/hr | |
| RLP 0041 | 97-00 - EO-2 Oxidizer Vent | | | | 8760 hr/yr | |

INVENTORIES
AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

Stack Information:

| ID | Description | Velocity (ft/sec) | Flow Rate (cubic ft/min-actual) | Diameter (feet) | Discharge Area (square feet) | Height (feet) | Temperature (°F) |
|---|-------------|----------------------|------------------------------------|--------------------|---------------------------------|------------------|---------------------|
| E0EG-2 Unit | | | | | | | |
| EQT 0012 01A-85 - DEG Rundown Tank T-EG930 (EG-2) | | 3.14 | 16.2 | .33 | | 28 | 102 |
| EQT 0014 01C-85 - TEG Rundown Tank T-EG930 (EG-2) | | 3.14 | 16.2 | .33 | | 28 | 73 |
| EQT 0016 02-86 - ISOPAR-L Storage Tank T-EO913 | | 3.14 | 16.2 | .33 | | 30 | 73 |
| EQT 0019 03-77 - EO-2 Cooling Tower W-EO801/12/3 | | 30.5 | 465000 | .18 | | 60 | 140 |
| EQT 0020 03-91 -Lean Absorbent Surge Tank T-EO800 | | 3.14 | 16.2 | .5 | | 26 | 77 |
| EQT 0021 04-91 - Brine Surge Tank T-EO633 (EO-2) | | 3.14 | 16.2 | .5 | | 18 | 57 |
| EQT 0022 04A-77 - EG Flasher Bottoms Storage T-EG911 | | 3.14 | 16.2 | .33 | | 30 | 94 |
| EQT 0023 04B-77 - ISOPAR-G Storage T-EO912 | | 3.14 | 16.2 | .33 | | 30 | 73 |
| EQT 0024 04C-77 - EG Rerun Tank T-EG923 (EG-2) | | 3.14 | 16.2 | .33 | | 30 | 73 |
| EQT 0025 04D-77 - EG Rundown Tank T-EG924 (EG-1) | | 3.14 | 16.2 | .33 | | 30 | 91 |
| EQT 0028 04E-77 - EG Rundown Tank T-EG925 (EG-1) | | 3.14 | 16.2 | .33 | | 30 | 73 |
| EQT 0027 04F-77 - DEG Rundown Tank T-EG931 (EG-2) | | 3.14 | 16.2 | .33 | | 16 | 79 |
| EQT 0028 04G-77 - DEG Rundown Tank T-EG932 (EG-2) | | 3.14 | 16.2 | .33 | | 16 | 80 |
| EQT 0029 04H-77 - TEG Rundown Tank T-EG938 (EG-2) | | 3.14 | 16.2 | .33 | | 16 | 74 |
| EQT 0030 04I-77 - TEG Rundown Tank T-EG939 (EG-2) | | 3.14 | 16.2 | .33 | | 16 | 73 |
| EQT 0033 06-91 - Process Analyzers EO-2 | | 12 | 3.6 | .08 | | 20 | 100 |
| EQT 0034 10-91 - EO-1&2 Brine Surge Tank T-EO810 | | 3.14 | 16.2 | .33 | | 16 | 55 |
| EQT 0035 15A2-71 - EG Rundown Tank T-EG991 (EG-2) | | 3.14 | 16.2 | .33 | | 30 | 73 |
| EQT 0038 15D2-71 - EG Rundown Tank T-EG992 (EG-2) | | 3.14 | 16.2 | .33 | | 30 | 91 |
| EQT 0039 15S3-71 - ISOPAR-L Storage T-EO910 | | 3.14 | 16.2 | .33 | | 24 | 73 |
| EQT 0040 15T1-71 - EG Rerun Tank T-EG922 (EG-1) | | 3.14 | 16.2 | .33 | | 28 | 73 |
| EQT 0041 15U1-71 - EG Rundown Tank T-EG920 | | 3.14 | 16.2 | .33 | | 28 | 73 |
| EQT 0042 15V1-71 - Carbonate Tank T-EG921 (EO-1/2) | | 3.14 | 16.2 | .33 | | 28 | 120 |
| EQT 0046 55-87 - TEG Bottoms Storage T-EG983 (EG-123) | | 3.14 | 16.2 | .33 | | 21 | 83 |
| EQT 0047 58-87 - TEG Bottoms Storage T-EG994 (EG-123) | | 3.14 | 16.2 | .33 | | 24 | 91 |
| EQT 0048 59A-88 - EO Tank Car Vent Absorber C-EO805 | | 6.01 | 195 | .83 | | 70 | 85 |
| EQT 0049 62A-88 - EO/EG Backup Gen Driver Y-EO600 | | 42.8 | 1292 | .8 | | 15 | 880 |
| EQT 0050 62B-88 - Diesel Storage T-EO604 | | 3.14 | 16.2 | .33 | | 10 | 73 |
| EQT 0051 104-00 - GBF Blms & TEG Blms T/T Load Spot 8 | | | | | | | 85 |
| EQT 0772 18-96 - Contaminated Steam Vent A-EC0503 | | 13.32 | 157000 | .5 | | 100 | 200 |
| FUG 0003 56C-88 - Fugitive Emissions EO2 | | | | | | | |
| FUG 0004 56D-88 - Fugitive Emissions EG2 | | | | | | | |

INVENTORIES

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20080010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

Stack Information:

| ID | Description | Velocity (ft/sec) | Flow Rate (cubic ft/min-actual) | Diameter (feet) | Discharge Area (square feet) | Height (feet) | Temperature (°F) |
|--|-------------|----------------------|------------------------------------|--------------------|---------------------------------|------------------|---------------------|
| E0EG-2 Unit | | | | | | | |
| FUG 0005 55E-B8 - Fugitive Emissions EO/EG Tank Farm | | | | | | | |
| RLP 0028 17-96 - A-EG502 Contaminated Steam Vent | 117 | 3800 | .83 | 1 | 100 | 200 | |
| RLP 0031 20-98 - EO-2 Sour Oil Gas Vent K-EO601 to atm | 1.2 | .57 | | | 200 | 200 | |
| RLP 0034 23A-98 - EG-2 Hohwell Vent V-EG801 | 2 | .01 | | | 20 | 100 | |
| RLP 0035 26-98 - EG2 GBF/Purif Vac Aftercond Vent E-EG801 | 7.5 | 41 | | | 43 | 109 | |
| RLP 0036 27-98 - EG2 DEG Col Vac Aftercond Vent E-EG803 | 33 | 40 | | | 43 | 98 | |
| RLP 0037 41-91 - EO Effl Pretreat Fd Tk Scrub Vent C-EO620 | .1 | .16 | | | 20 | 90 | |
| RLP 0039 84-88 - EO2 700 Vent | 11.3 | 47.7 | | | 70 | 90 | |
| RLP 0041 97-00 - EO-2 Oxidizer Vent | 51 | 23400 | 3.1 | | 50 | 282 | |

Relationships:**Subject Item Groups:**

| ID | Group Type | Group Description |
|----------|-----------------------|---|
| GRP 0017 | Equipment Group | - Routed to Vent Absorbers EO605/7/05 |
| GRP 0018 | Equipment Group | - Routed to Flare 3-73 in Permit No. 2689-V1 |
| GRP 0019 | Equipment Group | - Routed to Boilers, Emission Points 01A-71 and 01B-71 in Permit No. 2728-V0 or to Thermal Oxidizer 97-00 |
| GRP 0029 | Equipment Group | - Routed to Plant Bioreactor in Permit No. 2136-V2 |
| UNF 0006 | Unit or Facility Wide | - EOEG-2 Unit |

Group Membership:

| ID | Description | Member of Groups |
|----------|--------------------------------------|------------------|
| EQT 0033 | 06-91 - Process Analyzers EO-2 | GRP000000000118 |
| EQT 0032 | 04N-77 - EO Storage Vessel V-EO986 | GRP000000000117 |
| EQT 0053 | 04P-77 - EO Storage Vessel V-EO988 | GRP000000000117 |
| EQT 0054 | 04Q-77 - EO Storage Vessel V-EO989 | GRP000000000117 |
| EQT 0055 | 04S-77 - EO Storage Vessel V-EO987 | GRP000000000117 |
| EQT 0056 | 15T3-71 - EO Storage Vessel V-EO990 | GRP000000000117 |
| EQT 0057 | 15U3-71 - EO Storage Vessel V-EO991 | GRP000000000117 |
| EQT 0058 | 15V3-71 - EO Storage Vessel V-EO992 | GRP000000000117 |
| EQT 0059 | 15W3-71 - EO Storage Vessel V-EO993 | GRP000000000117 |
| EQT 0060 | 15X3-71 - EO Storage Vessel V-EO994 | GRP000000000117 |
| EQT 0061 | 15Y3-71 - EO Storage Vessel V-EO995 | GRP000000000117 |
| EQT 0108 | NNN-01 - Column C-EO720 | GRP000000000118 |
| EQT 0110 | PWW-04 - Process Wastewater V-EO205 | GRP00000000029 |
| EQT 0111 | PWW-05 - Process Wastewater V-EO303A | GRP00000000029 |

INVENTORIES

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20080010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

Group Membership:

| ID | Description | Member of Groups |
|----------|-------------------------------------|------------------|
| EQT 0112 | PWW-06 - Process Wastewater V-EO202 | GRP00000000029 |
| EQT 0113 | PWW-07 - Process Wastewater V-EO201 | GRP00000000029 |
| EQT 0114 | PWW-08 - Blowdown W-EO101 | GRP00000000029 |
| EQT 0115 | PWW-09 - Process Wastewater V-EO605 | GRP00000000029 |
| EQT 0116 | PWW-10 - Process Wastewater V-EG505 | GRP00000000029 |
| EQT 0117 | PWW-11 - Process Wastewater V-EG801 | GRP00000000029 |
| EQT 0118 | PWW-12 - Process Wastewater V-EG741 | GRP00000000029 |
| EQT 0119 | PWW-22 - EO2 Oxidizer KO Pot | GRP00000000029 |
| EQT 0120 | PV-04 - Process Vent K-EO601 | GRP00000000019 |
| EQT 0121 | PV-05 - Process Vent K-EO804 | GRP00000000019 |
| EQT 0122 | PV-06 - Process Vent K-EO303A | GRP00000000018 |
| EQT 0123 | PV-07 - Process Vent K-EO703 | GRP00000000018 |
| EQT 0125 | 80-88 - Flasher Tops Accum V-EG731 | GRP00000000018 |

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

Annual Maintenance Fee:

| Fee Number | Air Contaminant Source | Multipier | Units Of Measure |
|------------|---|-----------|------------------|
| 0630 | 0630 Organic Oxides, Alcohols, Glycols (Rated Capacity) | 1 | MMfb/yr |

SIC Codes:

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1136 - Shell Chemical Co. - Geismar Plant

Activity Number: PER20090010

Bearbeitet am: 20.07.2015

Aar : Title V Regional Permit Minor Mod

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1136 - Shell Chemical Co. - Geismar Plant

Activity Number: PER20090010

Permit Number: 2057-V5

Air - Title V Regular Permit Minor Mod

| Subject Item | CO | | | NOx | | | PM10 | | | SO2 | | | VOC | | |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Avg lb/hr | Max lb/hr | Tons/Year |
| EOEG-2 Unit | | | | | | | | | | | | | | | |
| EOT 0046 53-47 | | | | | | | | | | | | | | | |
| EOT 0047 59-46 | | | | | | | | | | | | | | | |
| EOT 0048 62-46 | 0.001 | 0.50 | 0.01 | | | | | | | | | | 0.02 | 2.00 | 0.04 |
| EOT 0049 62-46 | 2.77 | 2.77 | 0.57 | 12.81 | 12.81 | 2.65 | 0.92 | 0.92 | 0.19 | 0.85 | 0.85 | 0.18 | 1.22 | 1.22 | 0.25 |
| EOT 0050 62B-46 | | | | | | | | | | | | | 0.001 | 0.01 | |
| EOT 0051 104-00 | | | | | | | | | | | | | 0.02 | 0.03 | 0.06 |
| EOT 0772 18-96 | | | | | | | | | | | | | 3.31 | 27.00 | 0.63 |
| FUG 0003 55C-46 | | | | | | | | | | | | | 4.70 | | 20.59 |
| FUG 0004 55G-46 | | | | | | | | | | | | | 0.95 | | 4.14 |
| FUG 0005 55E-46 | | | | | | | | | | | | | 1.55 | | 6.77 |
| RLP 0028 17-46 | | | | | | | | | | | | | 11.00 | 29.00 | 4.68 |
| RLP 0031 20-46 | | | | | | | | | | | | | 57.28 | 71.33 | 5.01 |
| RLP 0034 23A-46 | | | | | | | | | | | | | 0.002 | 0.05 | 0.01 |
| RLP 0035 26-46 | 0.22 | 0.24 | 0.98 | | | | | | | | | | 0.01 | 0.06 | 0.04 |
| RLP 0036 27-46 | | | | | | | | | | | | | 0.002 | 0.05 | 0.01 |
| RLP 0037 41-91 | | | | | | | | | | | | | 0.02 | 6.00 | 0.09 |
| RLP 0039 64-46 | 0.002 | 0.50 | 0.01 | | | | | | | | | | 0.03 | 2.50 | 0.11 |
| RLP 0041 97-40 | 2.45 | 104.69 | 10.72 | 0.33 | 0.33 | 1.45 | 0.02 | 0.02 | 0.10 | 0.002 | 0.002 | 0.01 | 1.99 | 48.17 | 8.69 |

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant

Activity Number: PER20090010

Permit Number: 2057-V5

Air - Title V Regular Permit Minor Mod

| Emission PL | Pollutant | Avg lb/hr | Max lb/hr | Tons/Year |
|---------------------|-----------------|-----------|-----------|-----------|
| EQT 0020 03-91 | Ethylene glycol | <0.001 | | <0.01 |
| | Ethylene oxide | <0.001 | | <0.01 |
| EQT 0021 04-91 | Methanol | 0.01 | | 0.04 |
| EQT 0022 04A-77 | Ethylene glycol | 0.001 | | 0.01 |
| EQT 0024 04C-77 | Ethylene glycol | 0.001 | | 0.01 |
| EQT 0025 04D-77 | Ethylene glycol | 0.01 | | 0.05 |
| EQT 0026 04E-77 | Ethylene glycol | 0.01 | | 0.05 |
| EQT 0033 06-91 | Ethylene oxide | 0.002 | 0.002 | 0.002 |
| EQT 0034 10-91 | Methanol | 0.003 | | 0.01 |
| EQT 0035 15A2-71 | Ethylene glycol | 0.03 | | 0.13 |
| EQT 0036 15D2-71 | Ethylene glycol | 0.02 | | 0.09 |
| EQT 0040 15T1-71 | Ethylene glycol | 0.001 | | 0.01 |
| EQT 0041 15U1-71 | Ethylene glycol | 0.001 | | 0.01 |
| EQT 0042 15V1-71 | Ethylene glycol | 0.001 | | 0.01 |
| EQT 0048 59A-88 | Acetaldehyde | 0.01 | 0.50 | 0.02 |
| | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene glycol | 0.001 | 0.50 | 0.01 |
| | Ethylene oxide | 0.01 | 0.50 | 0.02 |
| | Formaldehyde | 0.004 | 0.50 | 0.01 |
| EQT 0051 104-00 | Ethylene glycol | 0.02 | 0.03 | 0.06 |
| EQT 0772 18-98 | Acetaldehyde | 0.23 | 1.50 | 0.06 |
| | Ethylene glycol | 3.00 | 25.00 | 0.75 |
| | Formaldehyde | 0.08 | 0.50 | 0.02 |
| | | | | |
| FUG 0003 55C-88 | Acetaldehyde | 0.003 | | 0.01 |
| | Ethylene glycol | 0.06 | | 0.27 |
| | Ethylene oxide | 0.29 | | 1.27 |
| | Methanol | 0.08 | | 0.36 |
| FUG 0004 55D-88 | Acetaldehyde | 0.001 | | 0.01 |
| | Ethylene glycol | 0.63 | | 2.77 |
| | Ethylene oxide | 0.07 | | 0.31 |
| FUG 0005 55E-88 | Ethylene glycol | 0.38 | | 1.68 |
| | Ethylene oxide | 0.28 | | 1.23 |
| | Methanol | 0.21 | | 0.91 |

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant

Activity Number: PER20090010

Permit Number: 2057-V5

Air - Title V Regular Permit Minor Mod

| Emission Pt. | Pollutant | Avg lb/hr | Max lb/hr | Tons/Year |
|--------------------|-----------------|-----------|-----------|-----------|
| RLP 0028 17-96 | Acetaldehyde | 0.75 | 3.20 | 0.32 |
| | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene glycol | 10.00 | 25.00 | 4.25 |
| | Formaldehyde | 0.25 | 0.80 | 0.11 |
| RLP 0031 20-96 | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene oxide | 0.16 | 0.22 | 0.01 |
| RLP 0034 23A-96 | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene glycol | 0.002 | 0.05 | 0.01 |
| RLP 0035 26-96 | Acetaldehyde | 0.01 | 0.01 | 0.03 |
| | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene glycol | 0.002 | 0.05 | 0.01 |
| | Ethylene oxide | 0.001 | 0.001 | 0.001 |
| RLP 0036 27-96 | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene glycol | 0.002 | 0.05 | 0.01 |
| RLP 0037 41-91 | Acetaldehyde | 0.001 | 5.00 | 0.01 |
| | Allyl chloride | 0.01 | 0.01 | 0.03 |
| | Chloroethane | 0.004 | 0.004 | 0.02 |
| | Ethylene glycol | 0.001 | 0.50 | 0.01 |
| | Ethylene oxide | 0.002 | 0.50 | 0.01 |
| | Methyl chloride | 0.001 | 0.001 | 0.01 |
| | Vinyl chloride | 0.002 | 0.002 | 0.01 |
| RLP 0039 64-96 | Acetaldehyde | 0.002 | 0.002 | 0.01 |
| | Allyl chloride | 0.001 | 0.001 | 0.001 |
| | Ethylene glycol | 0.002 | 0.002 | 0.01 |
| | Ethylene oxide | 0.002 | 0.002 | 0.07 |
| | Formaldehyde | 0.01 | 0.01 | 0.02 |
| RLP 0041 97-00 | Acetaldehyde | 0.21 | 9.13 | 0.92 |
| | Ethylene glycol | 0.16 | 6.85 | 0.69 |
| | Ethylene oxide | 0.26 | 11.42 | 1.15 |
| | Formaldehyde | 0.01 | 0.46 | 0.06 |
| UNF 0006 | Acetaldehyde | | | 1.39 |
| | Allyl chloride | | | 0.04 |
| | Chloroethane | | | 0.22 |
| | Ethylene glycol | | | 10.90 |

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant

Activity Number: PER20090010

Permit Number: 2057-V5

Air - Title V Regular Permit Minor Mod

| Emission Pt. | Pollutant | Avg lb/hr | Max lb/hr | Tons/Year |
|--------------|----------------|-----------|-----------|-----------|
| UNF 0006 | Ethylene oxide | | | 4.07 |
| | Formaldehyde | | | 0.22 |
| | Methanol | | | 1.32 |
| | Vinyl chloride | | | <0.01 |

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-VS
 Air - Title V Regular Permit Minor Mod

EQT 0019 03-77 - EO-2 Cooling Tower W-EO601/2/3

- 1 [40 CFR 63.402] Do not use chromium-based water treatment chemicals in any affected IPCT. Subpart Q.

EQT 0020 03-91 - Lean Absorbent Surge Tank T-EO600

- 2 [40 CFR 63.149(a)] Comply with the provisions of 40 CFR 63 Subpart G Table 35 for each item of equipment meeting all the criteria specified in 40 CFR 63.149(b) through (d) and either (e)(1) or (e)(2). Subpart G. [40 CFR 63.149(a)]
 Permittee shall comply with all the applicable requirements of LAC 33:III:Chapter 51. NESHAP, 40 CFR 63, Subpart G is determined as MACT. Fixed roof tank contains process water with less than 1000 ppm of Table 9 OHAPs, no further controls required as per 40 CFR 63.149(c)(2).

EQT 0021 04-91 - Brine Surge Tank T-EO633 (EO-2)

- 4 [40 CFR 63.149(c)(2)] Shall comply with all the applicable requirements of 40 CFR 63.149(c)(2). Complies with Table 35 requirements. Subpart G. [40 CFR 63.149(e)(2)]
 5 [LAC 33:III:2103.A] Equip with a submerged fill pipe.
 6 [LAC 33:III:2103.H.3] Determine VOC maximum true vapor pressure using the methods in LAC 33:III:2103.H.3.a-e.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III:2103.I.1 - 7, as applicable.
 8 [LAC 33:III:5109.A] Emits Class III toxic air pollutants. No MACT is required.

EQT 0022 04A-77 - EG Flasher Bottoms Storage T-EG911

- 9 [40 CFR 63.119(a)(3)] Group 2 Tank: Permittee shall keep accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Volume recordkeeping by logbook at no required frequency. [40 CFR 63.119(a)(3), 40 CFR 63.123(a)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required.

EQT 0024 04C-77 - EG Rerun Tank T-EG923 (EG-2)

- 12 [40 CFR 63.119(a)(3)] Group 2 Tank: Permittee shall keep accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Volume recordkeeping by logbook at no required frequency. [40 CFR 63.119(a)(3), 40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required.

EQT 0025 04D-77 - EG Rundown Tank T-EG924 (EG-1)

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

EQT 0025 04D-77 - EG Rundown Tank T-EG924 (EG-1)

- 14 [40 CFR 63.119(a)(3)]
 15 [LAC 33:III.5109.A]

Group 2 Tank: Permittee shall keep accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Volume recordkeeping by logbook at no required frequency. [40 CFR 63.119(a)(3), 40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required.

EQT 0026 04E-77 - EG Rundown Tank T-EG925 (EG-1)

- 16 [40 CFR 63.119(a)(3)]
 17 [LAC 33:III.5109.A]

Group 2 Tank: Permittee shall keep accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Volume recordkeeping by logbook at no required frequency. [40 CFR 63.119(a)(3), 40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required.

EQT 0033 06-91 - Process Analyzers EO-2

- 18 [40 CFR 63.166]
 19 [40 CFR 63.172(d)]
 20 [40 CFR 63.180]
 21 [LAC 33:III.5109]

Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.
 Permittee shall use a flare as a control device and shall comply with all the applicable requirements of 40 CFR 63.172(d) and 63.11(b). [40 CFR 63.172(d)]
 Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.
 Shall comply with all the applicable requirements of LAC 33:III. Chapter 5. Compliance with SOCMI HON is considered compliance with the MACT requirements of LAC 33:III.5109.

EQT 0034 10-91 - EO-1&2 Brine Surge Tank T-EO810

- 22 [40 CFR 63.149(e)(2)]
 23 [LAC 33:III.2103.A]
 24 [LAC 33:III.2103.H.3]
 25 [LAC 33:III.2103.I]
 26 [LAC 33:III.5109.A]

Shall comply with all the applicable requirements of 40 CFR 63.149(e)(2). Complies with Table 35 requirements. Subpart G. [40 CFR 63.149(e)(2)]
 Equip with a submerged fill pipe.
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emits Class III toxic air pollutants. No MACT is required.

EQT 0035 15A2-71 - EG Rundown Tank T-EG991 (EG-2)

- 27 [40 CFR 63.123(a)]
 28 [LAC 33:III.5107]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required. [LAC 33:III.5107, LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 11136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER00090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0038 15D2-71 - EG Rundown Tank T-EG992 (EG-2)

- 29 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required. [LAC 33:III.5109.A]

EQT 0040 15T1-71 - EG Rerun Tank T-EG922 (EG-1)

- 31 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required. [LAC 33:III.5109.A]

EQT 0041 15U1-71 - EG Rundown Tank T-EG920

- 33 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]
 Emits Class III toxic air pollutants. No MACT is required. [LAC 33:III.5109.A]

EQT 0048 59A-86 - EO Tank Car Vent Absorber C-EO605

- 35 [LAC 33:III.2107.B] VOC, Total >= 90 % DRE.
 Which Months: All Year Statistical Basis: None specified
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2107.D.3-4.
 Determine compliance with LAC 33:III.2107.B using the methods in LAC 33:III.2107.E.1 through 5, as appropriate.
 Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.
 Permittee shall maintain the EO removal efficiency of 99 percent or greater. Determined as MACT.

EQT 0049 62A-8B - EO/EG Backup Gen Driver Y-EO600

- 40 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1138 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0049 62A-88 - EO/EG Backup Gen Driver Y-EO600

- 41 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average

EQT 0051 104-00 - GBF Btms & TEG Btms TT Load Spot 8

- 42 [40 CFR 63.130(f)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.130(f)(1) through (f)(3). Subpart G, [40 CFR 63.130(f)]
 43 [LAC 33:III.5109.A] Emits Class III toxic air pollutants. No MACT is required. [LAC 33:III.5107, LAC 33:III.5109.A]

EQT 0052 04N-77 - EO Storage Vessel V-EO986

- 44 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 45 [LAC 33:III.2103.I] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 46 [LAC 33:III.5109.A] Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0053 04P-77 - EO Storage Vessel V-EO988

- 47 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 48 [LAC 33:III.2103.I] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 49 [LAC 33:III.5109.A] Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0054 04Q-77 - EO Storage Vessel V-EO989

- 50 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 51 [LAC 33:III.2103.I] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 52 [LAC 33:III.5109.A] Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0055 04S-77 - EO Storage Vessel V-EO987

- 53 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 54 [LAC 33:III.2103.I] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 55 [LAC 33:III.5109.A] Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

EQT 0056 15T3-71 - EO Storage Vessel V-EO990

- 56 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0057 15U3-71 - EO Storage Vessel V-EO991

- 59 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0058 15V3-71 - EO Storage Vessel V-EO992

- 60 [LAC 33:III.2103.I] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0059 15W3-71 - EO Storage Vessel V-EO993

- 61 [LAC 33:III.5109.A] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0060 15X3-71 - EO Storage Vessel V-EO994

- 62 [LAC 33:III.2103.F] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.
 Emissions controlled by absorbers C-EO605 and C-EO705 with 95% efficiency.

EQT 0061 15Y3-71 - EO Storage Vessel V-EO995

- 63 [LAC 33:III.2103.I] Maintain working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0061 15Y3-71 - EO Storage Vessel V-E0995

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2.103.1.1 - 7, as applicable.
 Emissions controlled by absorbers C-E0605 and C-E0705 with 95% efficiency.

EQT 0062 CWHE003 - Cooling Water Heat Exchanger E-E0103

Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0063 CWHE004 - Cooling Water Heat Exchanger E-E0104

Heat Exchanger: The recirculating heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 4 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(5)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0065 CWHE005 - Cooling Water Heat Exchanger E-E0105

Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0066 CWHE006 - Cooling Water Heat Exchanger E-E0140

Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0067 CWHE007 - Cooling Water Heat Exchanger E-E0143

Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0068 CWHE008 - Cooling Water Heat Exchanger E-E0203

84 [40 CFR 63.104(a)(6)]
 Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0069 CWHE012 - Cooling Water Heat Exchanger E-E0216

86 [40 CFR 63.104(a)(6)]
 Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0070 CWHE013 - Cooling Water Heat Exchanger E-E0220

88 [40 CFR 63.104(a)(6)]
 Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0071 CWHE014 - Cooling Water Heat Exchanger E-E0221

90 [40 CFR 63.104(a)(6)]
 Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0072 CWHE024 - Cooling Water Heat Exchanger E-E0307

92 [40 CFR 63.104(a)(6)]
 Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0073 CWHE028 - Cooling Water Heat Exchanger A-E0608

94 [40 CFR 63.104(a)(1)]
 Heat Exchanger: The heat exchange system is operated with the minimum pressure on the cooling water side at least 5 psi greater than the maximum pressure on the process side. [40 CFR 63.104(a)(1)]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0073 CWHE028 - Cooling Water Heat Exchanger A-EO608

95 [LAC 33:III.5.109.A] Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0074 CWHE029 - Cooling Water Heat Exchanger

Heat Exchanger: The heat exchange system is operated with the minimum pressure on the cooling water side at least 5 psi greater than the maximum pressure on the process side. [40 CFR 63.104(a)(1)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0075 CWHE030 - Cooling Water Heat Exchanger E-EO503

96 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0076 CWHE031 - Cooling Water Heat Exchanger E-EO504

98 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0077 CWHE032 - Cooling Water Heat Exchanger E-EO603

99 [LAC 33:III.5.109.A] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0078 CWHE033 - Cooling Water Heat Exchanger E-EO605

100 [40 CFR 63.104(a)(6)] Heat exchange systems (cooling water): HAP monitored by the regulations specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more specified HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
 Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20080010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0078 CWHE033 - Cooling Water Heat Exchanger E-EO605

- 105 [40 CFR 63.104(d)] Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
- 106 [40 CFR 63.104(f)] Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
- 107 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0079 CWHE034 - Cooling Water Heat Exchanger

- 108 [40 CFR 63.104(a)(5)] Heat Exchanger: The recirculating heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 4 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(5)]
- 109 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0080 CWHE035 - Cooling Eater Heat Exchanger E-EO607

- 110 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
- 111 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0081 CWHE036 - Cooling Water Heat Exchanger E-EO608

- 112 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
- 113 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0082 CWHE037 - Cooling Water Heat Exchanger E-EO616

- 114 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
- 115 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0083 CWHE038 - Cooling Water Heat Exchanger E-EO617

SPECIFIC REQUIREMENTS

AJ ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20080010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0083 CWHE038 - Cooling Water Heat Exchanger E-EO617

- 116 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0084 CWHE39 - Cooling Water Heat Exchanger E-EO618

- 118 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0085 CWHE040 - Cooling Water Heat Exchanger E-EO619

- 120 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0086 CWHE041 - Cooling Water Heat Exchanger E-EO620

- 122 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0087 CWHE042 - Cooling Water Heat Exchanger E-EO621

- 124 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0088 CWHE043 - Cooling Water Heat Exchanger E-EO622

- 126 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

EQT 0088 CWHE043 - Cooling Water Heat Exchanger E-E0622

127 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0089 CWHE044 - Cooling Water Heat Exchanger E-E0623

128 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0090 CWHE045 - Cooling Water Heat Exchanger E-E0624

130 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0091 CWHE046 - Cooling Water Heat Exchanger E-E0625

132 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0092 CWHE047 - Cooling Water Heat Exchanger E-E0702

134 [40 CFR 63.104(b)] Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
 Which Months: All Year Statistical Basis: None specified
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

SPECIFIC REQUIREMENTS

AI ID: 1138 - Shell Chemical Co - Gelesmar Plant
 Activity Number: PER20080010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0093 CWHE048 - Cooling Water Heat Exchanger E-EO705

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]

Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33.III.Chapter S1.

EQT 0094 CWHE049 - Cooling Water Heat Exchanger E-EO706

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]

Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33.III.Chapter S1.

EQT 0095 CWHE50 - Cooling Water Heat Exchanger E-EO707

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

EQT_0095 CWHE50 - Cooling Water Heat Exchanger E-E0707

- 147 [40 CFR 63.104(d)] Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III, Chapter 51.

EQT_0096 CWHE51 - Cooling Water Heat Exchanger E-E0708

- 150 [40 CFR 63.104(b)] Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
 Which Months: All Year Statistical Basis: None specified
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III, Chapter 51.

EQT_0097 CWHE52 - Cooling Water Heat Exchanger E-E0709

- 151 [40 CFR 63.104(d)] Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
 Which Months: All Year Statistical Basis: None specified
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III, Chapter 51.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

EQT 0098 CWHE053 - Cooling Water Heat Exchanger E-E0712

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]

Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0099 CWHE054 - Cooling Water Heat Exchanger E-E0713

Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]

Which Months: All Year Statistical Basis: None specified

Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]

Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy continuously. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]

Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0100 CWHE055 - Cooling Water Heat Exchanger E-E0715

Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]

Compliance with all the applicable requirements of NESHAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0101 CWHE056 - Cooling Water Heat Exchanger E-E0716

SPECIFIC REQUIREMENTS

AJ ID: 1118 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0101 CWHE056 - Cooling Water Heat Exchanger E-E0716

- 168 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0102 CWHE057 - Cooling Water Heat Exchanger E-E0717

- 170 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0103 CWHE058 - Cooling Water Heat Exchanger E-E0718

- 172 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0104 CWHE059 - Cooling Water Heat Exchanger E-E0202

- 174 [40 CFR 63.104(a)(5)] Heat Exchanger: The recirculating heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 4 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(5)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0105 CWHE060 - Cooling Water Heat Exchanger EG-1

- 176 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III Chapter 51.

EQT 0106 CWHE061 - Cooling Water Heat Exchanger EG-2

- 178 [40 CFR 63.104(a)(6)] Heat Exchanger: Once through heat exchange system is used to cool process fluids that contain less than 5 percent by weight of total hazardous air pollutant listed in Table 9 of NESHPAP, 40 CFR 63, Subpart G. [40 CFR 63.104(a)(6)]

SPECIFIC REQUIREMENTS

AI ID: 1138 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0106 CWHE61 - Cooling Water Heat Exchanger EG-2

179 [LAC 33:III.5109.A]

Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0107 CWHE052 - Cooling Water Heat Exchanger EOEG 12

180 [40 CFR 63.104(a)(2)]

Heat Exchanger: There is an intervening cooling fluid, containing less than 5 percent by weight of total hazardous air pollutant listed in Table 4 of NESHPAP, 40 CFR 63, Subpart G, between the process and the cooling water. [40 CFR 63.104(a)(2)]
 Compliance with all the applicable requirements of NESHPAP, 40 CFR 63.104 is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0108 NNN-01 - Column C-EQ0720

182 [40 CFR 60.662(b)]

Combust the emissions in a flare that meets the requirements of 40 CFR 60.18. Subpart NNN. [40 CFR 60.662(b)]

183 [40 CFR 60.663(b)(2)]

Flow recordkeeping by electronic or hard copy hourly. Record the bypass of the vent stream flow to the flare at least once every 15 minutes for each affected facility. Shall comply with the requirements of 40 CFR 60.703(b) as approved by LDEQ on April 7, 1999. Subpart NNN. [40 CFR 60.663(b)(2)]

184 [40 CFR 60.663(b)(2)]

Flow monitored by flow indicator hourly. Monitor the bypass line from the vent stream flow to the flare. Install the flow indicator in the vent stream at the entrance to any bypass line that could divert the vent stream. Shall comply with the requirements of 40 CFR 60.703(b) as approved by LDEQ on April 7, 1999 Subpart NNN. [40 CFR 60.663(b)(2)]

185 [40 CFR 64.]

Which Months: All Year Statistical Basis: None specified
 CAM: The emissions are routed to an existing Flare, Emission Point 3-73 in Permit No. 2669-V1. Compliance with the requirements of 40 CFR 60.18 is considered compliance assurance monitoring under 40 CFR 64.

EQT 0109 NNN-46 - Column C-EG503

186 [40 CFR 60.660(c)(4)]

Shall comply with all the applicable requirements of NESHPAP, 40 CFR 60.662, 60.664(d), (e), and (f), and 60.665(h) and (l) if TFE index value > 8 index value without use of VOC emission control device. Subpart NNN. [40 CFR 60.660(c)(4)]

187 [40 CFR 60.665(h)]

Which Months: All Year Statistical Basis: None specified
 Permittee complying with the provisions of 40 CFR 60.662(c) shall keep up-to-date, readily accessible records as per the requirements of 40 CFR 60.665(h). Subpart NNN. [40 CFR 60.665(h)]

188 [40 CFR 60.665(l)]

Submit report: Due semiannually. Submit initial report within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.665(l)(1) through (l)(7). Subpart NNN. [40 CFR 60.665(l)]

EQT 0110 PWW-04 - Process Wastewater V-EQ205

189 [40 CFR 63.132(a)(1)]

Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)
 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]

SPECIFIC REQUIREMENTS

AJ ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-Y5
 Air - Title V Regular Permit Minor Mod

EQT 0110 PWW-04 - Process Wastewater V-EO205

- 190 [40 CFR 63.132(b)(1)] Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0111 PWW-05 - Process Wastewater V-EO303A

- 194 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
 Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0112 PWW-06 - Process Wastewater V-EO202

- 199 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
 Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-W5
Air - Title V Regular Permit Minor Mod

EQT 0113 PWW-07 - Process Wastewater V-EO201

- 204 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(b)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
- 205 [40 CFR 63.132(b)(1)] Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
- 206 [40 CFR 63.132(c)] Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
- 207 [40 CFR 63.147] Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
- 208 [LAC 33.III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33.III.Chapter 51.

EQT 0114 PWW-08 - Blowdown W-EO101

- 209 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
- 210 [40 CFR 63.132(b)(1)] Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
- 211 [40 CFR 63.132(c)] Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
- 212 [40 CFR 63.147] Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
- 213 [LAC 33.III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33.III.Chapter 51.

EQT 0115 PWW-09 - Process Wastewater V-EO605

- 214 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(b)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
- 215 [40 CFR 63.132(b)(1)] Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
- 216 [40 CFR 63.132(c)] Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
- 217 [40 CFR 63.147] Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0115 PWW-09 - Process Wastewater V-EG605

218 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0116 PWW-10 - Process Wastewater V-EG505

Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
 Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(c), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0117 PWW-11 - Process Wastewater V-EG801

224 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
 Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(c), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G.
 Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0118 PWW-12 - Process Wastewater V-EG741

229 [40 CFR 63.132(a)(1)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
 Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]

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SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

EQT 0118 PWW-12 - Process Wastewater V-EG741

- 231 [40 CFR 63.132(c)] Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G. Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0119 PWW-22 - EO2 Oxidizer KO Pot

- 234 [40 CFR 63.132(a)(X)] Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]
 235 [40 CFR 63.132(b)(1)] Determine whether each wastewater stream requires control for Table 8 compounds by complying with the requirements in either 40 CFR 63.132(b)(1)(i) or (b)(1)(ii), and (b)(1)(iii). Subpart G. [40 CFR 63.132(b)(1)]
 236 [40 CFR 63.132(c)] Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G. Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

EQT 0120 PV-04 - Process Vent K-E0601

- 239 [LAC 33:III.5109.A] Emissions routed to an existing Boilers, F-U201 and F-U202 in Permit No. 2136-V2.

EQT 0121 PV-05 - Process Vent K-E0604

- 240 [LAC 33:III.5109.A] Emissions routed to an existing Boilers, F-U201 and F-U202 in Permit No. 2136-V2.

EQT 0122 PV-06 - Process Vent K-E0303A

- 241 [LAC 33:III.5109.A] Emissions routed to an existing Flare, Emission Point 03-73 in Permit No. 2669-V0.

EQT 0123 PV-07 - Process Vent K-E0703

- 242 [LAC 33:III.5109.A] Emissions routed to an existing Flare, Emission Point 03-73 in Permit No. 2669-V0.

SPECIFIC REQUIREMENTS

AJ ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER0080010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

EQT 0124 PV-15 - Process Vent K-EO605

243 [LAC 33:III.5109.A] Emissions routed to an existing Thermal Oxidizer, Emission Point 97-00.

EQT 0125 80-86 - Flasher Tops Accum V-EG731

244 [40 CFR 60.662(b)]

245 [40 CFR 60.663(b)(2)]

Combust the emissions in a flare that meets the requirements of 40 CFR 60.18. Subpart NNN. [40 CFR 60.662(b)]
 Flow monitored by flow indicator hourly. Monitor the vent stream flow to the flare. Install the flow indicator in the vent stream from each affected facility at a point closest to the flare and before being joined with any other vent stream. Subpart NNN. [40 CFR 60.663(b)(2)]
 Which Months: All Year Statistical Basis: None specified

Flow recordkeeping by electronic or hard copy hourly. Record the vent stream flow to the flare at least once every hour for each affected facility. Subpart NNN. [40 CFR 60.663(b)(2)]

TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]

Which Months: All Year Statistical Basis: None specified
 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

CAM: The emissions are routed to an existing Flare, Emission Point 3-73 in Permit No. 2669-V1. Compliance with the requirements of 40 CFR 60.18 is considered compliance assurance monitoring under 40 CFR 64.

Compliance with all the applicable requirements of NSPS, 40 CFR 60, Subpart NNN is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

FUG 0003 55C-88 - Fugitive Emissions EO2

254 [40 CFR 63.162(c)]

Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]

SPECIFIC REQUIREMENTS

All ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

FUG 0003 55C-88 - Fugitive Emissions EO2

- 255 [40 CFR 63.162(f)] Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(6)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]
- 256 [40 CFR 63.163(b)(1)] Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase I); or 5,000 ppm (phase II), pumps handling polymerizing monomers), 2,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]
- 257 [40 CFR 63.163(b)(3)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]
- 258 [40 CFR 63.163(c)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) or 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]
- 259 [40 CFR 63.163(d)(2)] Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]
- 260 [40 CFR 63.163(d)(4)] Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]
- 261 [40 CFR 63.163(e)(1)] Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-loop system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- 262 [40 CFR 63.163(e)(2)] Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- 263 [40 CFR 63.163(e)(3)] Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- 264 [40 CFR 63.163(e)(4)] Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified

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- 265 [40 CFR 63.163(e)(6)(i)] Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)]
- Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each pump as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.163(b)(3) and (e)(4), and the daily requirements of 40 CFR 63.163(c)(5). Subpart H. [40 CFR 63.163(h)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart H. [40 CFR 63.164(c)]
- Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]

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- Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- Which Months: All Year Statistical Basis: None specified
 Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H.
- Which Months: All Year Statistical Basis: None specified
 Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- Which Months: All Year Statistical Basis: None specified
 Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]
- Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- Which Months: All Year Statistical Basis: None specified
 Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.
- Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified
 Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified
- 277 [40 CFR 63.164(i)(2)]
- 278 [40 CFR 63.164]
- 279 [40 CFR 63.165(a)]
- 280 [40 CFR 63.165(b)(1)]
- 281 [40 CFR 63.165(b)(2)]
- 282 [40 CFR 63.165(d)(2)]
- 283 [40 CFR 63.166]
- 284 [40 CFR 63.167]
- 285 [40 CFR 63.168(c)]
- 286 [40 CFR 63.168(c)]

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- 287 [40 CFR 63.168(d)(1)] Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]
- Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]
- Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]
- Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]
- Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
- Which Months: All Year Statistical Basis: None specified
- 294 [40 CFR 63.168(i)(1)]
- 295 [40 CFR 63.168(i)(3)]

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- Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
- Which Months: All Year Statistical Basis: None specified
- Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]
- Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. Subpart H.
- Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(l)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(iii)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(l)(2)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(l)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]
- Closed-vent system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(j)(1)]
- Closed-vent system (bypass lines): If applicable, Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(j)(1)]
- Which Months: All Year Statistical Basis: None specified

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- Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(j)(2)]
- Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H.
- [40 CFR 63.172(l)(1)]
- Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(l)(2).
- Which Months: All Year Statistical Basis: None specified
- Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]
- Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]

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- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
- Which Months: All Year Statistical Basis: None Specified
 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(g). Subpart H. [40 CFR 63.173(d)(6)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]
- Which Months: All Year Statistical Basis: None Specified
 Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]
- Agitators in gas/vapor service or light liquid service (difficult to monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]

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|-----|---------------------------|--|
| 325 | [40 CFR 63.173(h)(3)] | Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)] |
| 326 | [40 CFR 63.173(j)(1)] | Which Months: All Year Statistical Basis: None specified Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)] |
| 327 | [40 CFR 63.173(j)(2)] | Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)] |
| 328 | [40 CFR 63.174(b)(1)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)] |
| 329 | [40 CFR 63.174(b)(2)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within the first 12 months after initial startup or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63 Subpart H, whichever is later, except as specified in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(2)] |
| 330 | [40 CFR 63.174(b)(3)(i)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)] |
| 331 | [40 CFR 63.174(b)(3)(ii)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)] |
| 332 | [40 CFR 63.174(c)(1)(i)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)] |
| 333 | [40 CFR 63.174(c)(2)(i)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)] |

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- Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]
- Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]
- Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
- Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
- Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2).
- Subpart H. [40 CFR 63.174(i)]
- Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.
- Permittee shall comply with all the applicable requirements of recordkeeping and reporting as per 40 CFR 63.181 and 182. VOHAP (surrogate for HAP) recordkeeping by inspection records as needed.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.181(a) through (k). Subpart H.
- Submit application: Due as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H). Submit application for approval of construction or reconstruction required by 40 CFR 63.5(d) in lieu of the Initial Notification. Subpart H. [40 CFR 63.182(b)]
- Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]
- Submit Initial Notification: Due within 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]

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- 347 [40 CFR 63.182(c)] Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]
- 348 [40 CFR 63.182(d)] Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]
- 349 [LAC 33:III.2(11)] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
- 350 [LAC 33:III.2(22)] Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart F and H plus the dual mechanical seals on EO pumps as per Order No. AE-O-94-0132 dated 9/25/1994. Constitutes MACT.

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- 352 [40 CFR 63.162(c)] Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]
- 353 [40 CFR 63.162(f)] Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(1)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]
- 354 [40 CFR 63.163(b)(1)] Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase I); or 5,000 ppm (phase III, pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]
- 355 [40 CFR 63.163(b)(3)] Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]
- 356 [40 CFR 63.163(c)] Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) or 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]
- 357 [40 CFR 63.163(d)(2)] Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]
- 358 [40 CFR 63.163(d)(4)] Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]

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- Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(5)]
- Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)]
- Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each pump as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.163(b)(3) and (e)(4), and the daily requirements of 40 CFR 63.163(e)(5). Subpart H. [40 CFR 63.163(h)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]

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- Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart H. [40 CFR 63.164(c)]
- Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H.
- Which Months: All Year Statistical Basis: None specified
- Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- Which Months: All Year Statistical Basis: None specified
- Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]
- Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- Which Months: All Year Statistical Basis: None specified

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- 380 [40 CFR 63.165(d)(2)] Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- 381 [40 CFR 63.166] Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.
- 382 [40 CFR 63.167] Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- 383 [40 CFR 63.168(c)] Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- 384 [40 CFR 63.168(c)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- 385 [40 CFR 63.168(d)(1)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
- 386 [40 CFR 63.168(d)(2)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
- 387 [40 CFR 63.168(e)(1)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(e)(3)]
- 388 [40 CFR 63.168(f)(3)] Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]

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- 390 [40 CFR 63.168(h)(1)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]
- 391 [40 CFR 63.168(h)(2)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation-specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
- Which Months: All Year Statistical Basis: None specified
- 392 [40 CFR 63.168(i)(1)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]
- 393 [40 CFR 63.168(i)(3)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
- Which Months: All Year Statistical Basis: None specified
- 394 [40 CFR 63.169(a)] Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
- Which Months: All Year Statistical Basis: None specified
- 395 [40 CFR 63.169(c)] Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]
- 396 [40 CFR 63.170] Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. Subpart H.
- 397 [40 CFR 63.172(0)(1)(i)] Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(0)(1)(i)]
- 398 [40 CFR 63.172(0)(1)(ii)] Which Months: All Year Statistical Basis: None specified
- Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(0)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified

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- 399 [40 CFR 63.172(0)(2)(i)]
Closed-event system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(i)]
 Which Months: All Year Statistical Basis: None specified
- 400 [40 CFR 63.172(0)(2)(ii)]
Closed-event system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(ii)]
 Which Months: All Year Statistical Basis: None specified
- 401 [40 CFR 63.172(h)]
 Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]
- 402 [40 CFR 63.172(j)(1)]
Closed-event system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(j)(1)]
- 403 [40 CFR 63.172(j)(1)]
Closed-event system (bypass lines): If applicable, Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(j)(1)]
- 404 [40 CFR 63.172(j)(2)]
 Which Months: All Year Statistical Basis: None specified
- 405 [40 CFR 63.172(j)(2)]
Closed-event system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]
- 406 [40 CFR 63.172(k)(1)]
 Which Months: All Year Statistical Basis: None specified
- 407 [40 CFR 63.172(k)(2)]
Closed-event system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- 408 [40 CFR 63.172(k)(2)]
Closed-event system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
- 409 [40 CFR 63.172(m)]
 Which Months: All Year Statistical Basis: None specified
- 410 [40 CFR 63.172(m)]
 Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]

SPECIFIC REQUIREMENTS

AI ID: 1138 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

FUG 0004 55D-88 - Fugitive Emissions EG2

- Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]
 Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
 Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(h) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
 Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

FUG 0004 55D-88 - Fugitive Emissions EG2

- 420 [40 CFR 63.173(d)] Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]
- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)]
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within the first 12 months after initial startup or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63 Subpart H, whichever is later, except as specified in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(2)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 11136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20080010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

FUG 0004 55D-88 - Fugitive Emissions EG2

- 428 [40 CFR 63.174(b)(3)(i)] Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)]
- Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]
- Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]
- Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
- Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
- Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2). Subpart H. [40 CFR 63.174(i)]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

FUG 0004 55D-88 - Fugitive Emissions EG2

- Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H. Permittee shall comply with all the applicable requirements of recordkeeping and reporting as per 40 CFR 63.181 and 182. VOHAP (surrogate for HAP) recordkeeping by inspection records as needed.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.181(a) through (k). Subpart H.
- Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]
- Submit application: Due as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H). Submit application for approval of construction or reconstruction required by 40 CFR 63.5(d) in lieu of the Initial Notification. Subpart H. [40 CFR 63.182(b)]
- Submit Initial Notification: Due within 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]
- Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]
- Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]
- Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
- Compliance with all the applicable requirements of NESHPAP, 40 CFR 63, Subpart H is considered compliance with all the applicable requirements of LAC 33:III 2122.
- Permittee shall comply with the requirements of 40 CFR 63, Subpart F and H plus the dual mechanical seals on EO pumps as per Order No. AE-O-94-0132 dated 9/25/1994. Constitutes MACT.

FUG 0005 55E-88 - Fugitive Emissions EO/EG Tank Farm

- Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]
- Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(1)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

FUG 0005 55E-88 - Fugitive Emissions EO/EG Tank Farm

- Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase I); 5,000 ppm (phase II); or 5,000 ppm (phase III, pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/meat service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) or 40 CFR 63.163(c)(4). Subpart H. [40 CFR 63.163(c)]
- Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]
- Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]
- Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)]

SPECIFIC REQUIREMENTS

AI ID: 11136 - Shell Chemical Co - Bismar Plant
Activity Number: PER20090010
Permit Number: 2057-W5
Air - Title V Regular Permit Minor Mod

FUG 0005 55E-88 - Fugitive Emissions EO/EG Tank Farm

- 463 [40 CFR 63.163(c)] Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(c)]
- 464 [40 CFR 63.163(h)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each pump as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.163(b)(3) and (e)(4), and the daily requirements of 40 CFR 63.163(e)(5). Subpart H. [40 CFR 63.163(h)]
- 465 [40 CFR 63.163(j)(1)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- 466 [40 CFR 63.163(j)(2)] Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- 467 [40 CFR 63.164(a)] Which Months: All Year Statistical Basis: None specified Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- 468 [40 CFR 63.164(b)(2)] Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure, or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)(2)]
- 469 [40 CFR 63.164(c)] Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart H. [40 CFR 63.164(c)]
- 470 [40 CFR 63.164(d)] Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- 471 [40 CFR 63.164(e)(2)] Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- 472 [40 CFR 63.164(g)] Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- 473 [40 CFR 63.164(i)(2)] Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AJ ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

FUG_0005 55E-88 - Fugitive Emissions EO/EG Tank Farm

- Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H.
- Which Months: All Year Statistical Basis: None specified Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(X)]
- Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.
- Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified
- 474 [40 CFR 63.164]
- 475 [40 CFR 63.165(a)]
- 476 [40 CFR 63.165(b)(1)]
- 477 [40 CFR 63.165(b)(2)]
- 478 [40 CFR 63.165(d)(2)]
- 479 [40 CFR 63.166]
- 480 [40 CFR 63.167]
- 481 [40 CFR 63.168(c)]
- 482 [40 CFR 63.168(c)]

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- 483 [40 CFR 63.168(d)(1)] Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
- 484 [40 CFR 63.168(d)(2)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(d)(2)]
- 485 [40 CFR 63.168(e)(1)] Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]
- 486 [40 CFR 63.168(f)(3)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]
- 487 [40 CFR 63.168(f)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(h) through (f). Comply with this requirement instead of the requirements in 40 CFR 63.168(h) through (f). Subpart H. [40 CFR 63.168(h)(1)]
- 488 [40 CFR 63.168(h)(1)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
- 489 [40 CFR 63.168(h)(2)] Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]
- 490 [40 CFR 63.168(i)(1)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
- 491 [40 CFR 63.168(i)(3)] Which Months: All Year Statistical Basis: None specified

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- Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
- Which Months: All Year Statistical Basis: None specified
- Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]
- Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. Subpart H.
- Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]
- Closed-vent system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(j)(1)]
- Closed-vent system (bypass lines): If applicable, Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(j)(1)]
- Which Months: All Year Statistical Basis: None specified

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- 502 [40 CFR 63.172(j)(2)] Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]
 Which Months: All Year Statistical Basis: None specified
- 503 [40 CFR 63.172(j)(2)] Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(j)(2)]
- 504 [40 CFR 63.172(k)(1)] Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(l)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(l)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- 505 [40 CFR 63.172(k)(2)] Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(l)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
- 506 [40 CFR 63.172(l)(1)] Which Months: All Year Statistical Basis: None specified
 Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(l)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(1)]
- 507 [40 CFR 63.172(l)(2)] Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(l)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]
- 508 [40 CFR 63.172(m)] Which Months: All Year Statistical Basis: None specified
 Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]
- 509 [40 CFR 63.173(a)] Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]
- 510 [40 CFR 63.173(b)] Which Months: All Year Statistical Basis: None specified
 Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
- 511 [40 CFR 63.173(c)] Which Months: All Year Statistical Basis: None specified
 Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]

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- 512 [40 CFR 63.173(d)(1)] Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). H. [40 CFR 63.173(d)(3)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (difficult to monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]

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| 521 | [40 CFR 63.173(h)(3)] | Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)] |
| 522 | [40 CFR 63.173(j)(1)] | Which Months: All Year Statistical Basis: None specified Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)] |
| 523 | [40 CFR 63.173(j)(2)] | Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)] |
| 524 | [40 CFR 63.174(b)(1)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)] |
| 525 | [40 CFR 63.174(b)(2)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within the first 12 months after initial startup or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63 Subpart H, whichever is later, except as specified in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(2)] |
| 526 | [40 CFR 63.174(b)(3)(i)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)] |
| 527 | [40 CFR 63.174(b)(3)(ii)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)] |
| 528 | [40 CFR 63.174(c)(1)(i)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)] |
| 529 | [40 CFR 63.174(c)(2)(i)] | Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)] |

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- Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]
- Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(e). Subpart H. [40 CFR 63.174(f)(1)]
- Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
- Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
- Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2). Subpart H. [40 CFR 63.174(i)]
- Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.
- Permittee shall comply with all the applicable requirements of recordkeeping and reporting as per 40 CFR 63.181 and 182. VOHAP (surrogate for HAP) recordkeeping by inspection records as needed.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.181(a) through (k). Subpart H.
- Submit application: Due as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H). Submit application for approval of construction or reconstruction required by 40 CFR 63.5(i) in lieu of the Initial Notification. Subpart H. [40 CFR 63.182(b)]
- Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]
- Submit Initial Notification: Due within 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]

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- 543 [40 CFR 63.182(c)] Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]
 544 [40 CFR 63.182(d)] Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]
 545 [LAC 33:III.2111] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
 546 [LAC 33:III.2122] Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart H is considered compliance with all the applicable requirements of LAC 33:III.2122.
 547 [LAC 33:III.5109.A] Permittee shall comply with the requirements of 40 CFR 63, Subpart F and H plus the dual mechanical seals on EO pumps as per Order No. AE-O-94-0132 dated 9/25/1994. Constitutes MACT.

RLP 0028 17-96 - A-EG502 Contaminated Steam Vent

- 548 [LAC 33:III.2115.K] Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.
 549 [LAC 33:III.5109.A] Good engineering practices and proper operation of the glycol concentrator to minimize venting is considered MACT under LAC 33:III.Chapter 51.

RLP 0031 20-96 - EO-2 Sour Oil Gas Vent K-EO601 to atm

- 550 [LAC 33:III.2115.K] Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.
 551 [LAC 33:III.5109.A] Compliance with LAC 33:III.2115 is considered MACT under LAC 33:III.5109.A. No controls required as per the requirements of LAC 33:III.2115.H.1.c. [LAC 33:III.5109.A, LAC 33:III.2115.H.1.c]

RLP 0034 23A-96 - EG-2 Hotwell Vent V-EG801

- 552 [LAC 33:III.5109.A] Emits Class I and II pollutants less than their respective minimum Emission rate (MER). No further controls required to comply with LAC33:III.Chapter 51.

RLP 0035 26-98 - EG2 GBF/Purif Vac Aftercond Vent E-EG801

- 553 [40 CFR 60.662(c)] TRE index value > 1 index value without use of VOC emission control device. Subpart NNN. [40 CFR 60.662(c)]
 Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

RLP 0035 26-98 - EG2 GBF/Purif Vac Aftercond Vent E-EG801

- Notify the DEQ with the specific provisions of 40 CFR 60.662 (40 CFR 60.662(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.662 that the operator elects to comply with. Conduct the performance test specified by 40 CFR 60.664 within 180 days after the change. Subpart NNN. [40 CFR 60.665(a)]
- Submit report: Due semiannually. Submit initial report within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.665(l)(1) through (l)(7). Subpart NNN. [40 CFR 60.665(l)]
- TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
- Which Months: All Year Statistical Basis: None specified Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(c)]
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(c), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]
- Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]
- Shall comply with the TRE index value limit specified under 40 CFR 60.662(c) including and shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment as specified under 40 CFR 60.663(e), 40 CFR 60.664(g). [40 CFR 63.662(c), 40 CFR 63.664(g)]
- Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33.III.Chapter 51.

RLP 0036 27-98 - EG2 DEG Col Vac Aftercond Vent E-EG803

- TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
- Which Months: All Year Statistical Basis: None specified Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(c)]
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant

Activity Number: PER20090010

Permit Number: 2057-V5

Air - Title V Regular Permit Minor Mod

RLP 0036 27-98 - EG2 DEG Col Vac Aftercond Vent E-EG803

- 566 [40 CFR 63.118(c)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]
- 567 [40 CFR 63.118(h)] Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]
- 568 [LAC 33:III.5109.A] Compliance with all the applicable requirements of NESHAP, 40 CFR 63, Subpart G is considered compliance with all the applicable requirements of LAC 33:III.Chapter 51.

RLP 0037 41-91 - EO Effi Pretreat Fd Tk Scrub Vent C-E0620

- 569 [LAC 33:III.2115.K] Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.
- 570 [LAC 33:III.501.C.6] Flow rate monitored by flow rate monitoring device daily.
Which Months: All Year Statistical Basis: None specified
Flow rate recordkeeping by electronic or hard copy daily.
- 571 [LAC 33:III.501.C.6] Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
Flow rate > 1 gallons/min.
- 572 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: 24-hour average
A water scrubber, E-E0620, with water flow indicator and a 98% efficiency is considered as MACT.

RLP 0039 64-86 - EO2 700 Vent

- 575 [40 CFR 63.119(e)] Permittee shall comply with all the applicable requirements of 40 CFR 63.119(e). Absorber efficiency shall be maintained at 95%. [40 CFR 63.119(e)]
- 576 [LAC 33:III.2115.K] Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.
- 577 [LAC 33:III.501.C.6] Flow rate > 9000 lb/hr of Lean Absorbent.
Which Months: All Year Statistical Basis: 24-hour average
Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
Flow rate recordkeeping by electronic or hard copy once every four hours.
Flow rate monitored by flow rate monitoring device once every four hours.
- 578 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 579 [LAC 33:III.501.C.6]
- 580 [LAC 33:III.501.C.6]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

RLP 0039 64-86 - EO2 700 Vent

581 [LAC 33:III.5109.A]

Permittee shall comply with all the applicable requirements of 40 CFR 63 Subpart G for Group 1 under the storage vessel provision. Controlled by an absorber having a 99% efficiency. Considered as MACT.

RLP 0041 97-00 - EO-2 Oxidizer Vent

582 [40 CFR 63.113(a)(2)]

Permittee shall comply with all the applicable requirements of 40 CFR 63.113(a)(2). [40 CFR 63.113(a)(2)]
 Shall maintain a minimum temperature of 1450 degrees F (24 hour average) with a residence time of 1.0 second to ensure 98% efficiency.
 Temperature monitored by continuous recorder continuously. [40 CFR 63.114(a)(1)(i)]
 Which Months: All Year Statistical Basis: 24-hour average
 Permittee shall comply with all the applicable requirements of 40 CFR 63 Subpart G for Group 1 vent. Considered as MACT under LAC 33:III.5109. [LAC 33:III.5109.A, LAC 33:III.5107.B]

UNF 0006 - EOEG-2 Unit

585 [40 CFR 60.]

586 [40 CFR 61.145(b)(1)]

All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
 Provide DEQ with written notice of intention to demolish or renovate prior to performing activities to which 40 CFR 61 Subpart M applies.
 Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. [40 CFR 61.145(b)(1)]
 Do not install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. Subpart M.
 Submit report: The facility does not generate benzene waste and the initial report was submitted on April 7, 1993 as specified in 40 CFR 61.357(a)(1). Subpart FF. [40 CFR 61.357(a)]
 All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.
 All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A.
 Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
 Outdoor burning of waste material or other combustible material is prohibited.
 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
 Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.1-7.
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-V5
 Air - Title V Regular Permit Minor Mod

UNF 0006 - EOEG-2 Unit

- 597 [LAC 33:III.2113.A]
 598 [LAC 33:III.219]
 599 [LAC 33:III.2201.D.9]
 600 [LAC 33:III.2201.E.1.a]
 601 [LAC 33:III.2201.E.1.d]
 602 [LAC 33:III.2201.E.1]
 603 [LAC 33:III.2201.E.1]
 604 [LAC 33:III.2201.G.2]
 605 [LAC 33:III.2201.J.1]
 606 [LAC 33:III.2201.J.2]
 607 [LAC 33:III.2201.J.2]
 608 [LAC 33:III.2901.D]
 609 [LAC 33:III.2901.F]
 610 [LAC 33:III.501.C.1]
- Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5. Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance. Do not fire an affected point source with Number 6 Fuel Oil or perform testing of emergency and training combustion units without prior approval of DEQ on a day that is designated as an Ozone Action Day by DEQ. Establish an emission factor for each applicable affected point source such that if each affected point sources was operated at its averaging capacity, the cumulative emission factor in pounds NOx/MMBTU from all point sources in the averaging group would not exceed the facility-wide emission factor. Use the equations in LAC 33:III.2201.E. to calculate the cumulative emission rate and the facility-wide emission factor. Include in the submitted plan a description of the actions that will be taken if any under-controlled unit is operated at more than 10 percent above its averaging capacity. Submit a request for approval to use a facility-wide averaging plan, that includes the details of the plan, to DEQ either separately or with the permit application or in the optional compliance plan described in LAC 33:III.2201.F.7. Comply with the facility-wide averaging plan as approved by DEQ. Perform NOx emissions testing for all point sources that are subject to the emission limitations of LAC 33:III.2201.D or used in one of the alternative plans of LAC 33:III.2201.E, as specified in LAC 33:III.2201.G.2 through G.7. Test results must demonstrate that actual NOx emissions are in compliance with the appropriate limits of LAC 33:III. Chapter 22. Also measure CO, SO2, PM10, and VOC if modifications could cause an increase in emissions of any of these compounds. Modify and/or install and bring into normal operation NOx control equipment and/or NOx monitoring systems in accordance with LAC 33:III. Chapter 22 as expeditiously as possible, but by no later than May 1, 2005, except as provided in LAC 33:III.2202. Complete required testing to demonstrate the performance of existing, unmodified equipment in a timely manner, but by no later than November 1, 2005, except as provided in LAC 33:III.2202. Complete all initial compliance testing, specified by LAC 33:III.2201.G, for equipment modified with NOx reduction controls or a NOx monitoring system to meet the provisions of LAC 33:III. Chapter 22 within 60 days of achieving normal production rate or after the end of the shake down period, but in no event later than 180 days after initial start-up, except as provided in LAC 33:III.2202. Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited. If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G. Submit permit application: Due prior to construction, reconstruction or modification unless otherwise provided in LAC 33:III. Chapter 5. Submit a timely and complete permit application to the Office of Environmental Services, Permits Division as required in accordance with the procedures in LAC 33:III. Chapter 5.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-VS
Air - Title V Regular Permit Minor Mod

UNF 0006 - EOEG-2 Unit

Maintain best practical housekeeping and maintenance practices at the highest possible standards to control emissions of highly reactive volatile organic compounds (HR VOC), which include Butene, cis-2-Butene, trans-2-Butene, Ethylene, Propylene. Maintain, to the extent practicable, a leak-free facility taking such steps as are necessary and reasonable to prevent leaks and to expeditiously repair leaks that occur. Update the written plan presently required by LAC 33:III.2113.A.4 within 30 days of receipt of this permit to incorporate these general duty obligations into the housekeeping procedures. The plan shall then be considered a means of emission control subject to the required use and maintenance provisions of LAC 33:III.905. Failure to develop, use, and diligently maintain the plan shall be a violation of this permit.

Permittee may add/replace/remove fugitive components, except compressors, at the units without triggering the need to apply for a permit modification, provided that:

- a. Change in components involve routine maintenance or undertaken to address safety concerns, or involve small piping revisions with no associated emission increases except from the fugitive emission component themselves;
 - b. The changes do not involve any associated increases in production rate or capacity, or tie in of new or modified process equipment other than the piping component;
 - c. Actual emissions following the changes will not exceed the emission limits contained in this permit; and
 - d. The components are promptly incorporated into any applicable LDAR program.
- Comply with the requirements of the Nonattainment New Source Review Program. This permit includes provisions of the Nonattainment New Source Review Procedures (NNSR) from LAC 33:III.504.
- Any major source as defined in LAC 33:III.502 is designated a Part 70 source and is required to obtain a permit which will meet the requirements of LAC 33:III.507.
- Any nonmajor (area) source of hazardous air pollutants required to obtain an operating permit pursuant to regulations promulgated under section 112 of the federal Clean Air Act is designated a Part 70 source and is required to obtain a permit which will meet the requirements of LAC 33:III.507.
- Any nonmajor source required to obtain an operating permit pursuant to regulations promulgated under section 111 of the federal Clean Air Act is designated a Part 70 source and is required to obtain a permit which will meet the requirements of LAC 33:III.507.
- Any affected source, as defined in LAC 33:III.502, pursuant to the acid rain provisions of title IV of the federal Clean Air Act is designated a Part 70 source and is required to obtain a permit which will meet the requirements of LAC 33:III.507.
- Any solid waste incineration unit required to obtain a permit pursuant to section 129(e) of the federal Clean Air Act is designated a Part 70 source and is required to obtain a permit which will meet the requirements of LAC 33:III.507.

611 [LAC 33:III.501.C.6]

612 [LAC 33:III.501.C.6]

613 [LAC 33:III.501.C.6]

614 [LAC 33:III.504]

615 [LAC 33:III.507.A.1.a]

616 [LAC 33:III.507.A.1.b]

617 [LAC 33:III.507.A.1.c]

618 [LAC 33:III.507.A.1.d]

619 [LAC 33:III.507.A.1.e]

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
 Permit Number: 2057-Y5
 Air - Title V Regular Permit Minor Mod

UNF 0006 - EOEG-2 Unit

620 [LAC 33:III.507.B.2]

No Part 70 source may operate after the time that the owner or operator of such source is required to submit a permit application under Subsection C of this Section, unless an application has been submitted by the submittal deadline and such application provides information addressing all applicable sections of the application form and has been certified as complete in accordance with LAC 33:III.517.B.1. No Part 70 source may operate after the deadline provided for supplying additional information requested by the permitting authority under LAC 33:III.519, unless such additional information has been submitted within the time specified by the permitting authority. Permits issued to the Part 70 source under this Section shall include the elements required by 40 CFR 70.6. The Louisiana Department of Environmental Quality hereby adopts and incorporates by reference the provisions of 40 CFR 70.6(a), as in effect on July 21, 1992. Upon issuance of the permit, the Part 70 source shall be operated in compliance with all terms and conditions of the permit. Noncompliance with any federally applicable term or condition of the permit shall constitute a violation of the Clean Air Act and shall be grounds for enforcement action, for permit termination, revocation and reissuance, or revision, or for denial of a permit renewal application.

Any Part 70 source for which construction or operation has begun prior to the effective date of LAC 33:III.507 shall submit an application for an initial Part 70 permit. Permit applications shall be prepared in accordance with LAC 33:III.517 and with forms and guidance provided by DEQ, and shall be submitted no later than one year after the effective date of the Louisiana Part 70 program.

Any source which becomes subject to the requirements of LAC 33:III.507 after the effective date of the Louisiana Part 70 program due to regulations promulgated by the Environmental Protection Agency or by the Department of Environmental Quality shall submit an application to the Office of Environmental Services, Permits Division in accordance with the requirements established by the applicable regulation. In no case shall the required application be submitted later than one year from the date on which the source first becomes subject to LAC 33:III.507.

Any permit application to renew an existing permit shall be submitted at least six months prior to the date of permit expiration, or at such earlier time as may be required by the existing permit or approved by the permitting authority. In no event shall the application for permit renewal be submitted more than 18 months before the date of permit expiration.

No major stationary source or major modification to which the requirements of this Part apply shall begin actual construction without a permit issued under this Section.

A major stationary source or major modification shall meet each applicable emissions limitation under the Louisiana State Implementation Plan and each applicable emissions standard and standard of performance under the Louisiana New Source Performance Standards (LNSPS) and Louisiana Emission Standards for Hazardous Air Pollutants (LESHAP) and Sections 111 and 112 of the Clean Air Act.

A new major stationary source shall apply best available control technology for each pollutant subject to regulation under this Section that it would have the potential to emit in significant amounts.

A major modification shall apply best available control technology for each pollutant subject to regulation under this Section which would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

UNF 0006 - EOEG-2 Unit

621 [LAC 33:III.507.C.1]

622 [LAC 33:III.507.C.3]

623 [LAC 33:III.507.E.4]

624 [LAC 33:III.509.I.1]

625 [LAC 33:III.509.J.1]

626 [LAC 33:III.509.J.2]

627 [LAC 33:III.509.J.3]

628 [LAC 33:III.509.J.4]

SPECIFIC REQUIREMENTS**AI ID: 1136 - Shell Chemical Co - Geismar Plant****Activity Number: PER20090010****Permit Number: 2057-V5****Air - Title V Regular Permit Minor Mod****UNF 0006 - EOEG-2 Unit**

- 629 [LAC 33:III.5105.A.1] Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III.Chapter 51.Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III.Chapter 51.Subchapter A, after the effective date of the standard.
- 630 [LAC 33:III.5105.A.1] Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III.Chapter 51.Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III.Chapter 51.Subchapter A, after the effective date of the standard.
- 631 [LAC 33:III.5105.A.2] Do not cause a violation of any ambient air standard listed in LAC 33:III.Table 51.2, unless operating in accordance with LAC 33:III.5109.B.
- 632 [LAC 33:III.5105.A.3] Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard.
- 633 [LAC 33:III.5105.A.4] Do not fail to keep records, notify, report or revise reports as required under LAC 33:III.Chapter 51.Subchapter A.
- 634 [LAC 33:III.5107.A.2] Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official.
- 635 [LAC 33:III.5107.A] Submit Annual Emissions Report: Due annually, by the 31st of March unless otherwise directed by DEQ, to the Office of Environmental Assessment in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- 636 [LAC 33:III.5107.B.1] Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but in no case later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property).
- 637 [LAC 33:III.5107.B.2] Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:III.1393.1, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:III.13923.
- 638 [LAC 33:III.5107.B.3] Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:III.13931. Submit notification in the manner provided in LAC 33:III.13923.
- 639 [LAC 33:III.5107.B.4] Submit written report: Due by certified mail to SPOC within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through B.3. Include the information specified in LAC 33:III.5107.B.4.a.i through B.4.a.viii.
- 640 [LAC 33:III.5107.B.5] Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, IF THEY CAN BE MEASURED AND CAN BE RELIABLY QUANTIFIED USING GOOD ENGINEERING PRACTICES, to DEQ along with the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge.

SPECIFIC REQUIREMENTS

AI ID: 1138 - Shell Chemical Co - Geismar Plant
Activity Number: PER20090010
Permit Number: 2057-V5
Air - Title V Regular Permit Minor Mod

UNF 0006 - EOEG-2 Unit

- 641 [LAC 33:III.5109.C]
- Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III.Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by DEQ.
- Submit notification in writing: Due to SPOC not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up.
- Submit notification in writing: Due to SPOC within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source.
- Submit notification: Due to the permitting authority prior to the initiation of any project which will result in emission reductions. Include in the notification a description of the proposed action, a location map, a description of the composition of air contaminants involved, the rate and temperature of the emissions, the identity of the sources involved and the change in emissions. Make any appropriate permit revision reflecting the emission reduction no later than 180 days after commencement of operation and in accordance with the procedures of LAC 33:III.Chapter 5. An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of LAC 33:III.5151.F.2 and F.3 for each demolition or renovation activity.
- Submit permit application: Due prior to commencement of construction, reconstruction, or modification of the source, for new or modified sources. Do not commence construction, reconstruction, or modification of any source required to be permitted under LAC 33:III.Chapter 5 prior to approval by the permitting authority.
- Submit permit application: Due by the date established for submittal in accordance with LAC 33:III.507.C. The permit application is for an initial permit to be issued in accordance with LAC 33:III.507. Provide a copy of each permit application pertaining to a major Part 70 source to EPA at the time of application submittal to the permitting authority.
- Submit permit application: Due by the date established by the permitting authority. The permit application is for any source for which grandfathered status has expired due to a change in ownership.
- Any application form, report, or compliance certification submitted under this Chapter shall contain certification by a responsible official of truth, accuracy, and completeness. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the application are true, accurate, and complete.
- Submit supplementary facts or corrected information: Due promptly upon becoming aware of failure to submit or incorrect submittal regarding permit applications. In addition, provide information as necessary to address any requirements that become applicable to the source after the date of filing a complete application but prior to release of a proposed permit.
- Submit applications for permits in accordance with forms and guidance provided by the DEQ. At a minimum, each permit application submitted under LAC 33:III.Chapter 5 shall contain the information specified in LAC 33:III.517.D, subparagraphs 1-8. In addition to those elements listed under LAC 33:III.517.D, include in each application pertaining to a Part 70 source the information specified in LAC 33:III.517.E, Subparagraphs 1-8.

SPECIFIC REQUIREMENTS

AJ ID: 1136 - Shell Chemical Co - Geismar Plant
 Activity Number: PER20090010
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Submit notification: Due within 90 days after any change in ownership of the source. Provide the notification in accordance with forms or guidance from the permitting authority and in accordance with requirements of LAC 33:1.1701.
 Submit permit modification application: Due within 45 days of obtaining relevant test results. The permit modification or amendment shall include all information necessary to process the request, and is required if testing demonstrates that the terms and conditions of the existing permit are inappropriate or inaccurate.

Submit application for temporary exemption for testing: Due prior to test initiation. Submit the information specified in LAC 33:III.517 (with the exception of the data being measured in the test). Conduct testing for the minimum duration consistent with obtaining valid results.

Submit test results: Due within 30 days of test completion to the administrative authority. The report details the conditions that were found to exist during a temporary exemption for testing. State if there is to be no permanent change in emissions from pretest conditions.

Comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537. [LAC 33:III.535, LAC 33:III.537]

Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority. During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations.

Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901.

Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.

Submit registration: Due January 31, 1998, or within 60 days after the source becomes subject to LAC 33:III.Chapter 59, whichever is later. Include the information listed in LAC 33:III.5911.B, and submit to the Department of Environmental Quality, Office of Environmental Compliance, Surveillance Division.

Submit amended registration: Due to the Department of Environmental Quality, Office of Environmental Compliance, Surveillance Division within 60 days after the information in the submitted registration is no longer accurate.

Install air pollution control facilities whenever practically, economically, and technologically feasible. When facilities have been installed on a property, use them and diligently maintain them in proper working order whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded.

Where, upon written application of the responsible person or persons, the administrative authority finds that by reason of exceptional circumstances strict conformity with any provisions of these regulations would cause undue hardship, would be unreasonable, impractical or not feasible under the circumstances, the administrative authority may permit a variance from these regulations.

No variance may permit or authorize the maintenance of a nuisance, or a danger to public health or safety.

Submit Emission Inventory (EI) Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year. Submit emission inventory data in the format specified by the Office of Environmental Assessment, Environmental Evaluation Division. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919 A-D.

SPECIFIC REQUIREMENTS

AI ID: 1136 - Shell Chemical Co - Geismar Plant
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Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:I.Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to the department pursuant to LAC 33:I.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases.